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Department of the Navy

Report to the Congress

Fiscal Year 1986

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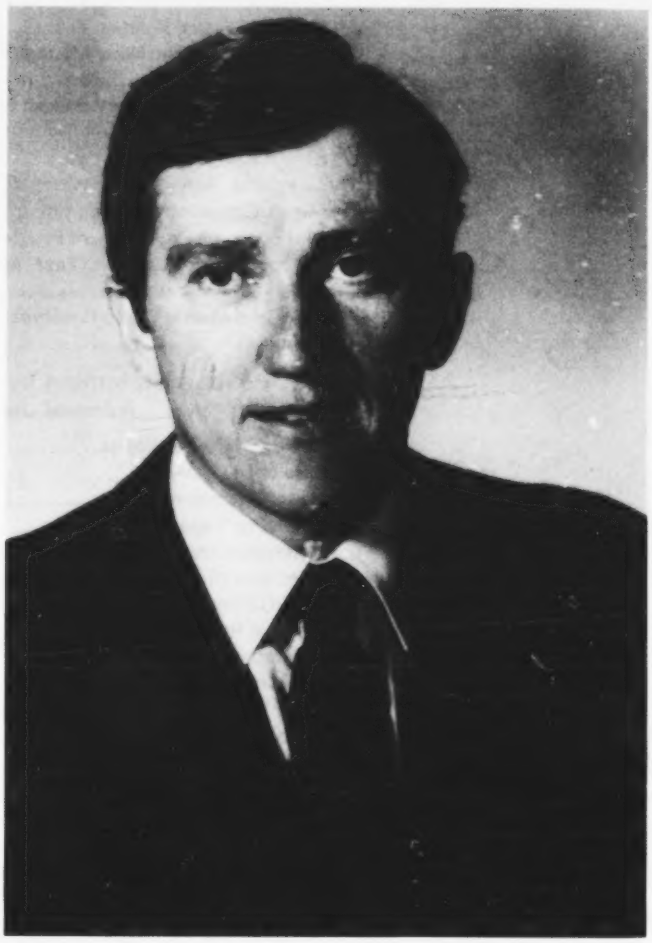
JOHN F. LEHMAN JR.
SECRETARY OF THE NAVY



On Jan. 23, 1981, President Reagan announced the selection of John F. Lehman Jr. to be Secretary of the Navy. He was confirmed by the Senate on Jan. 29 and took the oath of office on Feb. 5, becoming the 65th Secretary of the Navy and one of the youngest men to be appointed to that position.

Prior to this appointment, Dr. Lehman was president of Abington Corp., a management firm that specialized in defense matters.

He began his career in defense and foreign affairs as a staff member of the Foreign Policy Research Institute from 1967 to 1969 at the University of Pennsylvania. From 1969 to 1974, he served as special counsel and senior staff member to Dr. Henry Kissinger on the National Security Council, and from 1974 to 1975 was a delegate to the Mutual Balanced Force Reduction Negotiations in Vienna. He became Deputy Director of the U.S. Arms Control and Disarmament Agency in 1975, holding that position until 1977.

Upon graduating from the La Salle College High School, Lehman enrolled in St. Joseph's College, where he earned a B.S. in international relations in 1964. That same year, Lehman enlisted in the Air Force Reserve. He continued his education at Cambridge University in England as an Earhart Fellow and graduated in 1967, receiving a B.A. with honours law and an M.A. in international law and diplomacy. He left the Air Force Reserve and accepted a direct appointment to the rank of ensign in the Naval Reserve in January 1968. Subsequently, he was designated a naval flight officer (bombardier-navigator) and then pilot, and has been promoted successively to his current rank of commander. He is assigned to Medium Attack Wing One, Naval Air Station, Oceana, Va. In 1974, he earned his Ph.D. in international relations from the University of Pennsylvania. He has been a visiting fellow at Johns Hopkins School of Advanced International Studies and a Chubb Fellow at Yale.

Lehman has authored or co-authored several publications on national and international defense and foreign affairs subjects. They include: *The Prospects for Arms Control*, Ed. by J.E. Dougherty and J.F. Lehman Jr. (McFadden: New York, 1965); *Arms Control for the Late Sixties*, Ed. by J.E. Dougherty and J.F. Lehman Jr. (Van Nostrand: Princeton, 1967); *The Executive, Congress and Foreign Policy*, by John Lehman (Praeger: New York, 1976); *Aircraft Carriers: The Real Choices*, by John Lehman (Sage: 1978); and *Beyond the SALT II Failure*, by John Lehman and Seymour Weiss (Praeger: New York, 1981).

He was born on Sept. 14, 1942, in Philadelphia, Pennsylvania, and is married to the former Barbara Wieland. They have three children: Alexandra, 8, John F. III, 5, and Grace Virginia, 2. They reside in McLean, Va.

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A Report by
The Honorable John F. Lehman Jr.
Secretary of the Navy
on the
Fiscal Year 1986 Military Posture of the
U.S. Navy and Marine Corps

Mr. Chairman, I welcome this opportunity to appear for the fifth time to offer my assessment of the current posture of the Navy/Marine Corps team and to present the Department of the Navy Budget for Fiscal Year 1986.

As you review the result of President Reagan's naval recovery program of the last four years and begin the process of making decisions to guide its continuation for the next four years, I urge you to keep one principle paramount—accountability. Our democratic processes cannot succeed over time unless Congressional actions are based on an accurate perception of facts, a clear understanding of cause and effect, and a recognition of which actions have succeeded and which have failed. Your task is doubly difficult because so much misinformation has poured into the public and Congressional debate on the issue of the defense build-up of the last four years. In the postwar period, I doubt if there has ever been an issue treated in the media with such careless inattention to fact, or one addressed by so many amateurs purporting to speak with authority.

You may be sure that we in the Navy and Marine Corps will work with you to establish the true facts, to uncover the real chains of causality, and to understand which actions deserve your praise and encouragement and which your censure. At the end of the legislative process, I am confident you will take great pride in your partnership with the Department of the Navy and in the satisfaction that the 7 percent average annual real growth in resources that you have provided to us over the past four years has already accomplished significantly more than 7 percent growth in real capability, in quality, and in increased security. In my judgment, because of the unbelievable human quality, morale improvements, readiness and modernization improvements, and an increase in weapons systems capability, we have doubled our naval capabilities over the past four years.

Progress Report

This Committee well knows that it was only five years ago that the Chief of Naval Operations testified to Congress that the United States Navy no longer enjoyed superiority at sea. He expressed the imbalance between our naval capability and the missions required by national policy concisely: "We are trying to meet a three-ocean requirement with a one-and-a-half-ocean Navy."

Four years ago this administration submitted a naval recovery program that has guided our actions ever since. The program was based on President Reagan's commitment that, as he put it, "maritime superiority for us is a necessity." This necessity is but one component of our national defense strategy. Nevertheless, it is a fundamental requirement necessary for the success of any national strategy. The growth of the Soviet fleet into a global blue-water navy, a navy whose active deployments are now visible in our newspapers virtually every week, has meant that no coalition defense based on our global alliances could be executed without the rapid adoption of a different naval strategy and a larger fleet to carry it out. The program put forward four years ago to achieve this was simple and well defined. It was built upon seven elements:

- First, a more realistic strategy for the use of Navy/Marine Corps forces to maximize their deterrence in peacetime, and to prevail if deterrence fails.
- Second, the restoration of the quality, training, and morale of our personnel.
- Third, the restoration of the readiness of the Navy and Marine Corps through adequate maintenance, repair, spare parts, and support.
- Fourth, the modernization of our sea-based nuclear deterrent, the most survivable and enduring component of the U.S. strategic triad.
- Fifth, the establishment of a shipbuilding, reactivation, and conversion program to increase the force with the right kinds of ships and to save an industrial base on the verge of collapse.
- Sixth, to establish an aircraft modernization and procurement program to restore aircraft numbers and quality to meet operational requirements.
- Seventh, to build up stocks of ammunition and missiles to realistic objectives for sustaining combat.

I am pleased to report that our objectives remain exactly the same today as originally outlined four years ago and that the Navy and the Marine Corps are on course and on schedule in achieving them. In fact we are considerably further along than is generally recognized. Taking each of the seven elements in turn:

Strategy—Our maritime strategy is simple and straightforward because the tasks demanded of our naval forces are simple and straightforward:

- First, to prevent the seas from becoming a hostile medium of attack against the United States and its allies.
- Second, to ensure that we have unimpeded use of our ocean lifelines to our allies, our forward-deployed forces in peace and war, our energy and mineral resources, and our trading partners; to be able to project force from the seas in support of our national security objectives short of war; and to be able to bring force to bear directly in support of combat ashore, should deterrence fail.

The global maritime strategy set forward four years ago has been continuously refined and applied to training. It is a coherent and flexible strategy designed to be but one part—the prerequisite part—of our total national military strategy. It is also designed to incorporate not only Navy and Marine Corps forces, but is critically dependent on those of our sister services and the forces of our allies. By eliminating needless overlap in total capabilities, we believe our program will leave no vital maritime tasks uncovered. The past four years have seen major new agreements between the Navy/Marine Corps and the Air Force, the Army, and the Coast Guard. In addition, we have made extensive progress in multi-lateral and bi-lateral agreements with allied navies and air forces.

The fact that U.S. Air Force AWACS, tankers, and fighters are now an integral part of every significant naval exercise and theater strategy attests to the fact that while inter-service rivalry is strong on the playing fields of service academies, it does not interfere with the effective integration of operating forces.

Our maritime strategy is continually tested, refined, and updated through several important processes. The Navy senior operational commanders review it individually and as a group at least twice a year. It is examined, challenged, probed, and refined at the international level by senior American and allied military and civilian officials. We test it repeatedly in war games and simulations, especially the annual global war games at the Naval War College in Newport, R.I. It is used as the planning base for our major exercises—Navy, joint, and multi-national—and the exercises themselves become the crucible for testing its refinement and challenging its assumptions. Every exercise provides useful lessons learned, to be fed back into the planning process.

In addition, lessons learned from every real-world crisis or conflict are applied immediately and integrated into our strategy. Lessons learned from the Falkland Islands War, our own and Israeli operations in Lebanon, the Grenada intervention, and our constant monitoring of Soviet exercises and deployments are all examples. Much of our budget to request this year has been modified since last year by the lessons learned from intervening events as applied to our overall strategy. For example, in response to urgent requirements in Lebanon in 1983, the Navy purchased eight *Mastiff* mini-RPVs (Remotely Piloted Vehicles) from Israel. A Marine detachment has been formed to operate them and a Navy RPV unit will be designated in the near future. Also in December 1983, as a result of lessons learned from the Falklands, we accelerated installation of the *Phalanx* close-in weapons system on 18 ships serving in the dangerous waters of the Middle East. As a result of Grenada operations' analysis, we have modified communications equipment to improve interoperability in the future with U.S. Army ground forces.

Maritime Strategy and the Budget—It is important to understand the role that our maritime strategy plays in providing the foundation for building our annual budget. The Department of the Navy Planning and Programming cycle begins with a re-examination of our current strategy, and throughout the process we seek to identify those "strategy-stoppers" and uncertainties that may preclude us from executing it effectively. The principal role in identifying "strategy-stoppers" is played by the joint theater commanders-in-chief and the Navy fleet commanders-in-chief, in their quarterly reports. Based on their judgments, we then develop programs and plans to negate the most critical "strategy-stoppers" and to hedge against the most significant uncertainties.

Personnel—The past four years have seen the most dramatic change in the manning of the Navy and Marine Corps in the 209 years of our history. From the worst retention and recruiting in postwar history in 1979 and 1980, we have risen to the highest figures achieved since we began keeping records. We are meeting 100 percent of our recruiting goals, and have achieved 95 percent high school graduates in the Marine Corps and 93 percent in the Navy. In virtually every category we have increased retention to record highs: in skilled enlisted ratings, in pilots and naval flight officers, in nuclear-trained and surface warfare officers. From a situation four years ago when some of our ships could not deploy on schedule because the fleet was manned at only 91 percent, we are now at 100 percent ship manning for a Navy that has grown by more than 50 ships. In 1981, 13 percent of our ships and 25 percent of our aircraft squadrons were reporting themselves not combat ready as a result of personnel shortages. Today those percentages have dropped to less than 1 percent of each. The petty officer shortfall, which stood four years ago at 22,000, has been reduced now to below 6,000 and will be eliminated by 1988 if current trends continue.

The reorganization of the Naval Reserve to a "horizontal integration" has had the effect of shifting a substantial portion of our force structure manning to the Ready Reserve. A total of 35 ships of the 600-ship Navy will be manned by Selected Reserves. In addition to the augmentation of essentially all naval units by Selected Reserves upon mobilization. The 15th active carrier air wing has been deleted from the program and the 15th carrier will carry a Reserve Air Wing. This increased dependence on the use of the Ready Reserve has enabled us to hold the active manpower growth to about 1 percent per year.

A very significant indicator of the greater proficiency of our personnel is the aircraft accident rate. This past year, 1984, was the safest year for the fourth straight year in naval aviation history and the major mishap rate has dropped from 5.94 mishaps per hundred thousand flight hours in 1980 to only 3.31 per hundred thousand flight hours in 1984. That has brought about dollar savings in uncrashed aircraft in 1984 alone of nearly $200 million and the avoidance of much human tragedy.

Readiness—The fleet is more ready to go in harm's way than at any time in recent peacetime history. In

the past four years, combat readiness for surface ships has improved by 29 percentage points, for nuclear attack submarines by 34 percent and aviation squadrons by 42 percent. From FY 1981 to FY 1985, actual in-bin munition levels for Navy and Marine Corps major weapons (e.g. missiles and torpedoes) increased by 37 percent. (From FY 1985 to FY 1987, when current contracts will be delivered, these levels will increase by another 41 percent.) Despite the fact that there is a two to three year lag between funding and delivery, our overall ordnance stocks have grown between 10 and 60 percent larger than they were in 1981 and are increasing literally every day as deliveries reach the fleet.

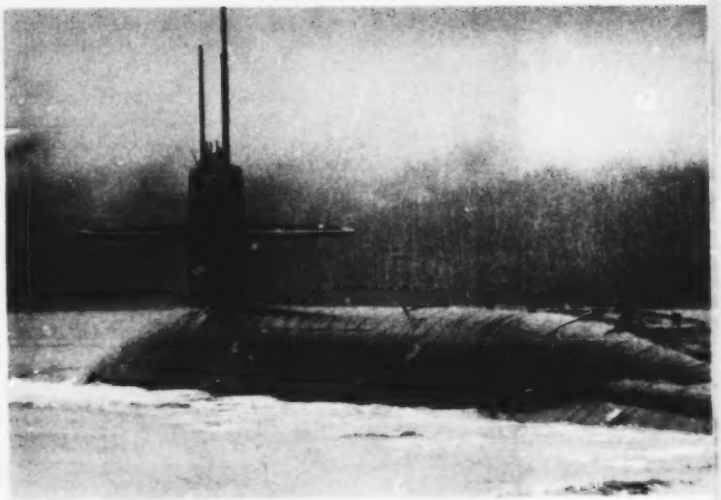
The net increase in spare parts and ammunition has been far greater than the actual increase in funding applied to it. The reason has been the dramatic reforms in the way we have managed these funds. Despite the misinformation provided by self-appointed experts on defense procurement, the Navy initiated a major reform of its spare parts buying under the direction of the Secretary of Defense. Nearly all of the horror stories appearing in the press were the result of a vigorous pursuit of abuse by Navy personnel at all levels. We have been able, for instance, to raise competition in our purchase of aviation spares from a deplorable low of 6.9 percent in 1982 to the current level of 25.4 percent and climbing. As a result, the increase of end items to the fleet is substantially more than the increase of funding would suggest.

Sea-based Nuclear Deterrent—The modernization of our sea-based leg of the strategic deterrent is proceeding well. We have added five *Trident* SSBNs to the fleet since 1981, with seven others authorized and building. The latest addition to the fleet was *Henry M. Jackson* (SSBN 730), commissioned in October 1984. During sea trials, *Trident* submarines have met or exceeded all of their design specifications.

The first eight *Trident* SSBNs are outfitting with the *Trident I* (C-4) missile, joining 12 *Poseidon* SSBNs equipped with the *Trident I*. Over the past four years the development schedule of the *Trident II* (D-5) was begun and then accelerated to an initial operational capability (IOC) of 1989. In addition, we have greatly strengthened command and control of our strategic forces, including construction of the Extremely Low Frequency (ELF) communications system, and have begun deployment of a follow-on TACAMO command and control aircraft. Last year we began deploying *Tomahawk* sea-launched cruise missiles equipped with nuclear warheads for theater nuclear deterrence. They are now operationally capable on our attack submarines, destroyers, and reactivated battleships. This highly reliable, accurate, low cost weapons system is a tremendous force multiplier that adds a new and very stabilizing dimension to our deterrent posture.

Shipbuilding—Four years ago the President set a goal of doubling the naval shipbuilding program. We have maintained that ambitious goal despite continuing cuts from the original budget estimates. We have brought dramatic new efficiency and discipline to the management of Navy shipbuilding, increasing the percentage of the shipbuilding budget awarded competitively from 15.7 percent in FY 1980 to 84.3 percent in FY 1985.

From the 479 battle force ships in the fleet when President Reagan took office, the fleet has grown to 530 ships today and 545 by the end of the fiscal year,



reaching 600 by the end of 1989. There are currently 103 naval ships now under construction, conversion or reactivation, at 21 different yards throughout the United States. By canceling the Carter Administration plans to retire the aircraft carriers *Coral Sea* (CV 43) and *Midway* (CV 41), and the DDG 2 and DDG 37 class destroyers, and by reactivating the battleships, we have been able to expand the fleet rapidly over the past four years without sacrificing investment in new construction for the '90s and the next century. An added benefit of this approach has been a major influx of new business and employment in the shipyards doing conversion, reactivation, overhaul, and ship repair. Because of the major emphasis on readiness maintenance spending, we have been able to reduce the backlog of ships awaiting overhaul from 16 in 1981 to zero today even as we have increased the fleet by more than 50 ships.

A substantial benefit to the economy and to deficit reduction has been the immediate creation of very substantial numbers of jobs in a declining shipbuilding and repair industry. The Navy shipbuilding and repair programs now account for over 80 percent of all employment in that industry in the United States. On the larger impact of Navy shipbuilding, it has been estimated that every billion dollars in the Navy shipbuilding program creates 27,000 direct jobs and 15,000 secondary jobs.

Aircraft—In each of the eight years preceding the Reagan rearmament program, the Department of the Navy was not able to procure enough aircraft to replace those lost through peacetime attrition. In each of the past four years, however, naval aircraft procurement has been nearly doubled from the average levels of the preceding four, and procurement of aircraft spares has more than tripled. These high rates of procurement have been maintained, despite successive budget cuts during those years, because of an historic reversal of cost trends in naval aircraft programs. For the third straight year, all naval aircraft procurement programs are on a firm-fixed-price contract basis, precluding the possibility of production cost overruns, and the annual prices of our new tactical aircraft have actually been coming down. Competitive pressures have been maintained by keeping four separate fighter and attack aircraft in production. In addition, we have

been able to maintain stable production rates through most of our aircraft lines. The first Navy and Marine Corps strike fighter squadrons are now in full operation with the F/A-18 *Hornet*. The carrier *Constellation* (CV 64) has now deployed with the first operational carrier air wing to include the F/A-18.

As part of the Reagan Administration emphasis on the Ready Reserve, new reserve units have been established and our reserve pilots are flying front line Navy aircraft. Some of these flying units are augmentation units to fill out fleet squadron strength upon mobilization, and others are commissioned squadrons.

Weapons and Ammunition—In the decade preceding the Reagan Administration, the Marine Corps was unable to procure sufficient ammunition to replace the stocks expended in normal peacetime training. As a result, sustainability and war reserves disappeared. During that same period, the Navy was held to such low levels of procurement of ammunition, missiles, and torpedoes that four years ago we did not have sufficient stocks to load out the reduced fleet of 479 ships—even once—with full magazines. We had less than a week's supply of the most important air defense munitions. Such enormous shortages created over a decade of unilateral disarmament in the '70s are not going to disappear overnight. But four years of sustained growth in our ammunition accounts has now begun to refill our munitions stockpiles. Ammunition and weapons funding was increased by more than 65 percent in real terms over the last four years, and a major reform of our procurement practices in munitions, emphasizing competition and dual sourcing, has made it possible now to have in hand the production rates necessary to reach our complete warfighting sustainability goals by 1989. That procurement rate is funded in the current budget.

The Navy Is Ready

As the progress report above makes clear, the course to re-establish maritime superiority set four years ago has not waivered. Momentum has continued to keep us on schedule. We have achieved an effective balance between building for the future and making the fleet we have today a maximum-ready fighting force. These results have already added enormously to our ability to deter Soviet adventurism and to stabilize the peace. The fleet and the Fleet Marine Force are more ready to go in harm's way than at any time in postwar history. Our friends and adversaries alike know this.

Soviet Naval Strategy and Operations During 1984

No plan, however well conceived, and no strategy, however well knit, should proceed with its assumptions unexamined. As the President's second term begins, it is essential that we consider once again the basis of our maritime strategy. Has anything changed about the Soviet threat that warrants an adjustment of our program? Is the international environment more conducive to the peaceful pursuit of maritime interests?

The clear answers to these questions are provided by the Soviets themselves and the nature of their naval operations.

During the '70s, the Navy described annually to Congress the enormous investment and effort going into

the blue-water naval construction program in the Soviet Union. During that same period, we began to see their success in establishing major naval and naval air facilities around the globe in Vietnam, Cuba, Ethiopia, South Yemen, Angola, and other areas. Moreover, we have observed them develop their exercises and training around a blue-water strategy. In 1984 we have seen more visibly than ever the fruits of their substantial efforts and investments of the '60s and the '70s. Today they sit astride our vital maritime vulnerabilities in the Caribbean straits, the Southeast Asian choke-points, the East and West African oil sea lanes, the Middle East oil sources, and off the Northern and Southern flanks of NATO.

Early in 1984 the Soviet Navy conducted the largest naval exercises they have ever conducted in the European theater. More than 200 naval combatants deployed in the Barents, Norwegian, and North seas. We saw the long-range use of Air Force and Navy *Backfires* and medium and heavy bombers, and we saw the employment of about 70 Soviet submarines in an integrated surface, submarine, amphibious, and air exercise. The nature of their exercise left little doubt that the Soviets seek to gain control of the Northern flank of NATO immediately in the event of war.

In our own hemisphere during 1984, the Soviets again deployed to the Caribbean a major task force, including a *Moskva* guided missile helicopter cruiser, a new *Udaloy* class guided missile destroyer, a replenishment ship, and a submarine. This was followed later in the year by another task force with a new *Sovremenny* class guided missile destroyer and four other ships. These were the 23rd and 24th regular deployments to the Caribbean by the new Soviet blue-water fleet. This is one more manifestation of their projection of maritime power into the hemisphere, most visibly evidenced by the now near-continuous off-loading of Soviet military hardware from Eastern bloc ships in Nicaragua.

In the Pacific the Soviets now have a permanent Pacific fleet of more than 500 ships including more than 130 submarines and two aircraft carriers. As we saw in the newspapers with the collision between the U.S. aircraft carrier *Kitty Hawk* (CV 63) and a Soviet *Victor* submarine, their submarines now are deployed regularly among all of our exercises and astride all of our sea lanes. The Soviets are more aware than most Americans that the United States has become dependent for nearly half of its oil needs on the sea lanes and that, in fact, we are considerably more dependent on sea-borne Alaskan oil than on Middle East oil. They are also more aware than most Americans that our sea-borne commerce with our Pacific trading partners now accounts for more than 130 percent of our commerce with our Atlantic trading partners.

The Soviets are demonstrating every day at sea that we no longer have a passive defensive strategy available to us on the world's oceans. Unlike in World War II, we do not have a Merchant Marine able to sustain losses in a submarine war of attrition. The Soviets today have more than 270 attack submarines, while Hitler very nearly won the Second World War in 1942 with about 60 submarines operational during most of the year.

The Soviet submarine threat is of particular concern and 1983 and 1984 saw major developments. Not only did we have two incidents of Soviet nuclear attack submarines actually hitting or inadvertently fouling our surface combatants, but we have now seen a developing pattern of regular deployments of nuclear attack submarines close off our principal naval ports. These Soviet nuclear submarines today have made great strides in quieting and overall capability in sensors and weapons. They currently are building three new classes of nuclear attack submarines. The *Sierra*, *Mike*, and *Akula*, and one new class of diesel attack submarines, *Kilo*. They are building two distinct classes of ballistic missile submarines, the *Typhoon* and *Delta IV*, and have at least one new submarine-launched ballistic missile program, the SS-NX-23.

While the Soviets have deployed, for more than 20 years, long-range cruise missiles capable of land attack, in 1984 they deployed for the first time a longer-range submarine-launched cruise missile comparable to our *Tomahawk*. While this new nuclear capability does not add to the target coverage or overall threat already existing against U.S. targets in their SLBM force, it does complicate our ability to ensure warning time for attack against our bomber bases. For the last five years the Soviets have averaged a production rate for all submarines of about 10 per year. This rate is expected to continue for the next four years at least.

As you have seen reported recently in the press, the Soviets are well along on their construction of their first full-scale nuclear-powered aircraft carrier able to operate catapult-launched and -arrested naval aircraft. We expect this ship to be operational in about 1990 and for it to be the first of a series.

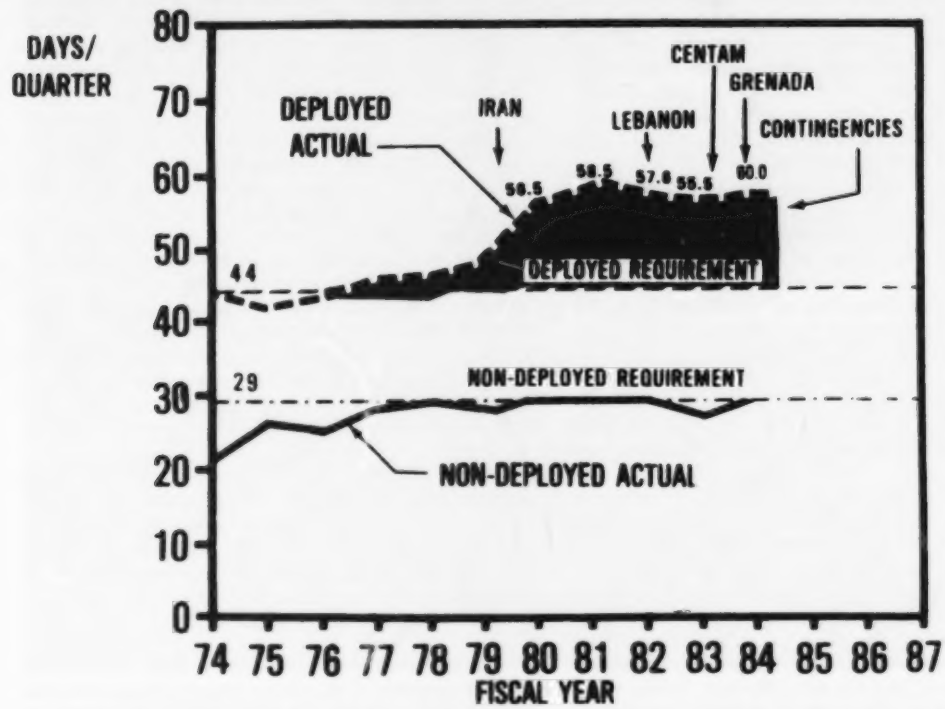
Naval Operations In 1984

It is well known by this committee that the naval service operates little differently in peacetime than it does in war. Naval operations in 1984 reflect the many responsibilities carried in normal peacetime deterrence around the world. Four years ago I testified that we were at a higher operating tempo (OPTEMPO) than we were at the height of the Vietnam War and that the fleet was spending more time at sea than it had even averaged in Second World War. It is one of my great disappointments that, despite adding some 50 ships to our operational fleet, we have been unable to make an appreciable reduction in OPTEMPO and the excessive time that naval personnel must spend away from their families. It is a top goal of the next four years to make substantial improvements in the time away from home port required of our sailors.

A good example of this peacetime OPTEMPO was the deployment of the battleship *New Jersey* (BB 62) during 1983 and 1984. She left Long Beach, Calif., in June of 1983 on what was to have been a 2 1/2 month shakedown cruise in the Western Pacific. She traveled to Thailand and the Philippines for joint exercises and was then ordered to Central America where she cruised for several weeks. She then transited the Panama Canal and proceeded, at an average of 25 knots, non-stop to a position off Beirut to support the Marine Amphibious Unit ashore. She remained there until May of 1984, having spent 322 days under way with only three port visits on a voyage that covered 76,000 miles. Yet during that full-year cruise, she never went below C-2 in readiness status and her crews' morale and performance could not have been exceeded. She was assisted by more than 10,000 sailor-days of service from selected ready reservists on voluntary active duty tours.

While off Beirut, *New Jersey* proved the tremendous worth of the battleships. Operating in support of the

SHIP OPTEMPO



SINCE 1978 DEPLOYED FORCES HAVE BEEN OPERATED BEYOND READINESS REQUIREMENTS TO COVER CONTINGENCIES:

CONTINUOUS INDIAN OCEAN PRESENCE
CENTRAL AMERICA
LEBANON
GRENADA

Marines ashore, she fired 5-inch and 16-inch naval gunfire on numerous occasions. On one day alone, she put 300 rounds of 16-inch on a ridge overlooking Beirut on which were placed hostile artillery batteries that had fired more than 5,000 rounds into areas of the city containing U.S. personnel, inflicting substantial civilian casualties. While television interviews with hostile personnel reported that the gunfire didn't hurt, the firing into Beirut ceased immediately and 10 numbered hostile batteries disappeared from the reporting force structure. The very high accuracy of the 16-inch gunfire and the lethal effect of the 1,900- and 2,700-pound projectiles make the battleship one of the most effective weapons systems in the world today.

The chart (pg.9) depicts the measured accuracy of the qualification firings of the battleship *Iowa* (BB 61) on July 21, 1984. Firing from ranges of 8,000, 15,000, 25,000, and 35,000 yards, *Iowa* literally blanketed the 200-by-200-meter square target with shells fired from distances of 13 and 18 miles. The U.S. Capitol has been overlaid on the chart, for comparison.

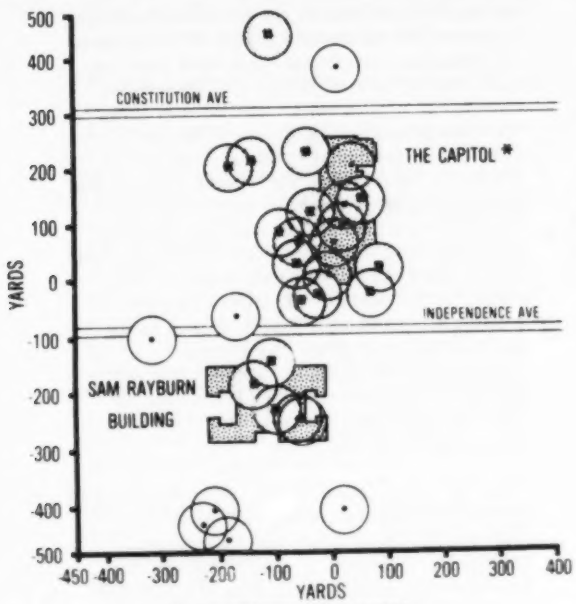
The year 1984 also saw our first *Aegis*-equipped guided missile cruiser, *Ticonderoga* (CG 47) spend over 80 percent of her time underway during a 6 1/2 month maiden cruise to the North Atlantic and the Mediterranean. In the Mediterranean she conducted 2,500 training intercepts of aircraft from two U.S. Navy carriers and fired naval gunfire missions in support of Marines in Lebanon. She then returned to the Caribbean for a final operational evaluation (OPEVAL) test in which she successfully downed 10 of 11 multiple target drones.

During 1984, the aircraft carrier *Ranger* (CV 61) and her battle group operating in the Pacific and Indian oceans set a record for sustained continuous operations for conventionally powered carrier battle groups. They remained at sea for 121 days, steaming more than 50,000 miles.

Early in 1984 the Mediterranean Amphibious Ready Group evacuated nearly 1,000 non-combatant Americans and foreign nationals from Lebanese ports using Marine helicopters and Navy landing craft. The evacuees were then transported from our amphibious ships off Lebanon to Cyprus. This was the same amphibious group that had earlier evacuated the American citizens and students from Grenada.

In 1984, we also deployed on short notice to find and neutralize mines which were endangering shipping in the Gulf of Suez. The surveying ship *Harkness*

USS IOWA (BB 61) 16-INCH FIRINGS



ALL DISTANCES IN YARDS

⊙ 16 ROUNDS FIRED FROM 25 THOUSAND YARDS

○ 16 ROUNDS FIRED FROM 36 THOUSAND YARDS

*** The U.S. Capitol has been overlaid on the chart for comparison.**

(T-AGS 32), the amphibious transport dock *Shreveport* (LPD 12), and a detachment of RH-53D minesweeping helicopters were provided, supported by U.S. Air Force units and in cooperation with allied naval forces. Three minesweeping helicopters and the Middle East Force flagship *LaSalle* (AGF 3) also operated off Saudi Arabian ports in response to a request from the Saudi government. During this combined operation, minesweepers from the United Kingdom recovered a new mine manufactured in the Soviet Union and believed to have been sown by a Libyan vessel.

In 1984, our SSBNs completed their 2,200th patrol, and routine naval surface presence was maintained continuously in the Mediterranean, the Western Pacific, the Indian Ocean and the Caribbean. In addition, significant exercises and deployments were conducted off both coasts of South America and off West Africa, and in the Norwegian, Baltic, and Black seas, and the Southwest Pacific. Naval exercises were held with virtually all our maritime allies and all major naval exercises were conducted with active participation by U.S. Air Force and Coast Guard and some Army units. In the course of these deployments we concluded the first visit to an Indian port by a U.S. naval warship in 13 years.

U.S.—PRC Naval Relations

At the invitation of Defense Minister Zhang Aiping of the People's Republic of China, I traveled to China for three days of discussions with Premier Zhao Ziyang, Defense Minister Zhang Aiping, Admiral Liu Huaqing, head of the Chinese Navy, and other officials of the Peoples Liberation Army.

Continuing the initiatives of Secretary Weinberger in his visit to China in September 1983, we discussed actions to begin cooperative relations between the Chinese Navy and the United States Navy and Marine Corps. The Chinese agreed in principle to permit U.S. naval ships to visit Chinese naval ports, and to send Chinese naval ships to visit U.S. ports at a later time. We agreed in principle to begin discussions on cooperating on the modernization of the anti-submarine warfare capabilities of the PRC Navy. I extended an invitation to Admiral Liu to visit the United States as a guest of the Chief of Naval Operations and the Commandant of the Marine Corps. He in turn asked me to extend invitations to Admiral Watkins and to General Kelley to visit the PRC. An invitation was also extended to the Minister of Defense and Admiral Liu to visit a carrier battle group at a convenient time in the future.

The remainder of the visit was spent as guests of the PRC Navy visiting the North Fleet and East Fleet headquarters at Qing Dao and Shanghai, and inspecting various schools and ships and facilities of the Chinese Navy. The welcome extended by the Chinese Navy could not have been more cordial and our discussions were serious and productive. We are confident that cooperation between our two navies will be to the mutual benefit of both in increasing the stability of peace in the Western Pacific.

Department of the Navy Management Initiatives

The remarkable progress achieved in four years in the naval recovery program is testimony to the success of the vigorous program of management reform instituted by Secretary Weinberger. Four years ago he reversed a long and disastrous trend toward centralization and bureaucratization of management, with its attendant diffusion and destruction of line accountability. His leadership has brought about a new discipline and new accountability. Management authority has been returned to the Service Secretaries and they have been held accountable for achieving real reform in the development and procurement process. The Committee should take special note of the six fundamental changes made in the management of the Department of the Navy:

- *First, true competition.* We have sought true competition, not merely the appearance of competition through source selection followed by decades of monopoly production. We have pursued a policy of establishing second sources in every appropriate program. We have raised the percentage of competition in our shipbuilding from 15.7 percent in 1980 to 84.3 percent in 1985. We have raised acquisition of all spare parts from only 15.7 percent competitive in 1981 to 28.8 percent in 1984, with a goal of 40 percent in FY 1985.

Two years ago we established at flag rank a Competition Advocate General reporting to the Assistant Secretary of the Navy and the Chief of Naval Material. He now has a network of some 300 Competition

Advocates throughout the Navy's acquisition commands.

In FY 1984 we awarded $14.5 billion competitively, or 37 percent of all Navy procurement dollars. That performance reflected a 54 percent increase over the total dollars we awarded competitively in FY 1982. Over 50 percent of all individual contract actions executed in FY 1984 were competitive.

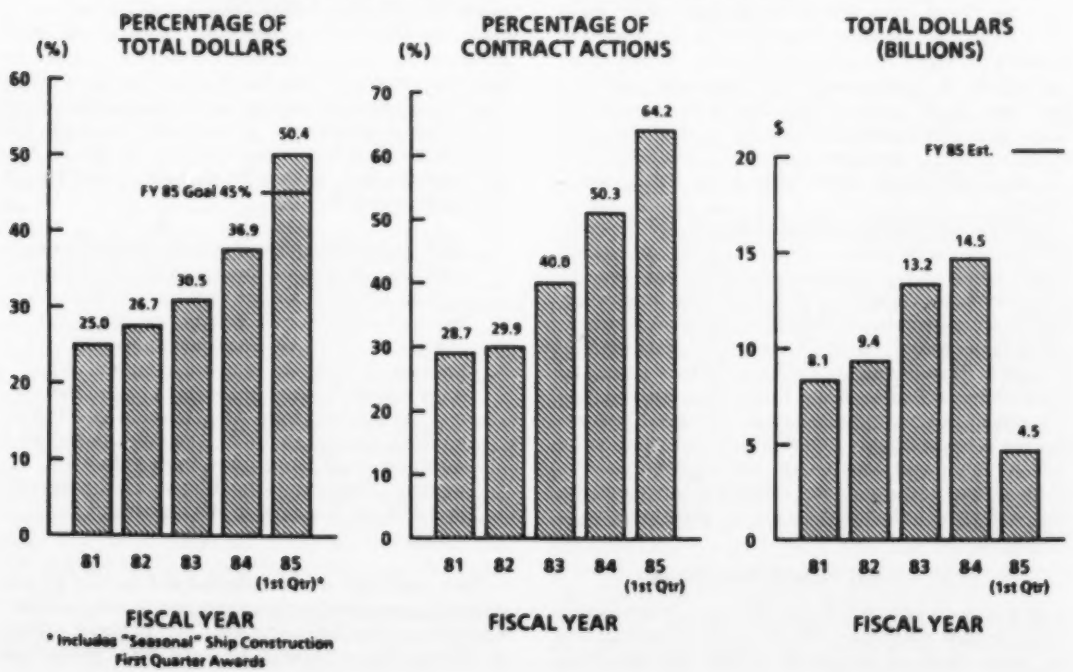
Contract savings from this new competitive approach in shipbuilding have been enormous. The savings from just the first two years of competition in the previously sole-sourced *Aegis* cruiser program have now reached $382 million below the budget projections. In November 1984 we awarded six ship contracts under this competitive procurement system on fixed-price contracts. This brought in the 10 ships involved for $243 million less than budgeted. Competition in FY 1984 and FY 1985 for the SSN 688 class submarines resulted in savings of $184 million from the President's budget requests. The list goes on and on. As a result of these competitive savings, we were able to fund the entire battleship *Missouri* (BB 63) at $430 million from contract savings and, in addition, were able to contribute $640 million from our shipbuilding savings to assist in funding the MX program.

In a major initiative this year we have selected Pratt & Whitney to compete annually with General Electric as the second source for the superb Navy-developed F-404 fighter engine.

- *Second, gold plating control.* Without question, competition and fixed-price contracts are the formula for reducing costs in major procurement. But they can also be a formula for disaster, litigation, and claims, if a military service does not discipline its tendency to gold plate and to increase and change requirements during contract execution. Gold plating is now under firm control in the Department of the Navy. An Air Characteristics Improvement Board and a Ship's Characteristics Improvement Board have now been established to control design and equipment changes in production of aircraft and ships. This has proved to be a very effective obstacle to gold plating and will carry into force our "Block Upgrade" policy. Under this policy, necessary changes and modernizations in design are made only with new annual contracts and are priced and negotiated at that time rather than piecemeal in the middle of production runs. Very substantial savings have resulted from this procedure. No contract or engineering changes may be submitted for negotiation without the signature of the Commandant of the Marine Corps or the Chief of Naval Operations, and the Secretary of the Navy.

- *Third, program stability.* You will note that the personnel readiness, shipbuilding, and aircraft procurement goals have not been changed as I present to you the sixth Reagan recovery budget. This stability is unprecedented in peacetime history, avoiding the ragged ups and mostly downs of previous five-year plans with the terrible costs and efficiency penalties that such uncertainty brings. Most of our aircraft programs have remained at stable long-term levels, and the

DEPARTMENT OF THE NAVY
PROCUREMENT COMPETITION PERFORMANCE



multi-year procurement initiatives that we have been able to achieve in the C-2A aircraft, NATO *Sea Sparrow* missile, MK-46 torpedo, and CH-53E helicopter programs are saving the taxpayers more than $400 million compared to their annual purchase prices.

- *Fourth, contract discipline, accountability, and quality assurance.* We have moved from a policy of treating cost-plus contracts as normal to treating them as being only acceptable as an absolute last resort for very high risk programs. Our policy now requires more equitable sharing between the government and its contractors, providing increased incentives for excellent performance and immediate contractor penalties for poor performance. We have put all of our aircraft procurement programs on firm-fixed-price type contracts and all of our ships on fixed-price incentive contracts with a 50/50 share line above and below the contract price. We have renegotiated contracts inherited from prior years to eliminate the more lenient terms on such programs as *Tomahawk*, *Trident*, and the SSN 688 submarine. We now provide our contractors with the opportunity to make more profit than heretofore allowable by achieving performance that nets the taxpaper a substantially lower price. The corollary is that we require the contractor to bear immediately the cost of poor performance. Industry had responded at first with reluctance and now mild enthusiasm. After years of very late deliveries, cost overruns, and litigation and claims, all of our submarines are now on, or ahead of, schedule. The four most recent *Trident* submarines were delivered to the Navy four to seven weeks early. *Theodore Roosevelt* (CVN 71) was launched last October nearly 18 months ahead of schedule and more than $100 million under budget.

- *Fifth, people.* The people who manage our acquisition programs are critical to improving the way we do business. We must have experienced and highly skilled people performing program management and contracting functions to implement our acquisition strategy and cost-reduction initiatives.

  All studies of acquisition management, including a current GAO review of major weapons systems acquisition management, agree that proper education, systems acquisition experience, and career incentives are essential to bring high quality people into the the acquisition business and keep them there. Accordingly, last December we approved a new program which establishes a "Navy Material Professional." That program is now being implemented. The career path of the Material Professional will integrate sea tours with acquisition tours for the entire career. The individual will be selected to be a Material Professional and the warfare specialty will be relegated to a secondary role. Approximately one-third of our flag officer billets have been set aside for Material Professionals.

  Establishment of the Material Professional's career path will provide the education, experience, and most importantly, the career incentives required to make our acquisition managers capable, skilled business professionals with the warfare background necessary to properly manage weapons systems acquisition.

- *Sixth, research and development (R&D) reform.* In a major effort to make dramatic increases in the productivity of our R&D dollars and in substantially shortening the time from concept to delivery, fundamental changes have been made in R&D management. In 1981 we had more than 500 R&D programs. Today we have reduced that to 400, while increasing steadily the amount of funding placed in these programs. We have moved away from cost-plus contracts for R&D toward requiring the contractor to participate in risk sharing.

Beyond even this, we have pioneered a dramatic new concept in firm-fixed-price packaged development of aircraft, where appropriate. The first of these breakthrough initiatives were the jointly-negotiated fixed-price contracts for the complete redesign of the F-14D and the A-6F aircraft upgrade programs. Both of these aircraft will be entirely re-equipped with new engines, new avionics, new survivability features, new cockpits, and new radars, for a combined total R&D cost on a firm-fixed-price contract totaling less than half of the cost that it took to develop the F/A-18. The third example of this approach was the contract signed in 1984 with McDonnell Douglas and British Aerospace on a firm-fixed-price package of $438 million for the complete development of the T-45A Navy carrier jet trainer. This contract was brought in at about half of the budget estimate of $810 million.

Emphasis in our research and development programs will continue to concentrate on achieving levels of high technology as a fundamental tool of American defense policy. We can never hope to match the numerical superiority of a totalitarian adversary such as the Soviet Union, but we can indeed maintain technological superiority to counter its advantage in numbers. The trendy arguments that cheaper and smaller are better are simply false. They have been invalidated time and time again in the Gulf of Sidra, Bekaa Valley, and the Falkland Islands. The results we are achieving now, with the F/A-18 requiring less than half the maintenance man-hours per flight hour of the aircraft that it replaces, have enabled us to reduce our manpower requirements by some 50 personnel per squadron.

Similarly, *Ticonderoga*, the first *Aegis* cruiser, has completed its first deployment manned by only 300 enlisted men and 26 officers, roughly a third of the complement needed for the CG 10 class that it replaces.

As previously noted, naval aviation has just completed its fourth straight safest year in history. The current generation of high tech naval aircraft such as

the F/A-18, F-14A, and A-6E now has a safety record more than twenty times better than the so-called low-cost fighters of 30 years ago.

Results

The results of these management initiatives are quite dramatic. A few highlights are listed below:

- The disputes, litigation, claims, cost overruns, and schedule delays that characterized naval shipbuilding in the '70s have been eliminated. Over the last three years (FY 1982-84), 71 ships have been delivered to the Navy of which 27 were ahead of schedule, 32 on schedule, and only 12 behind schedule. The net of all three years is 31 months ahead of schedule for all ships. After years of bitterness and massive cost overruns and claims in our submarine programs, nearly all submarines have been delivered on or ahead of their contract delivery dates for the last three years and on or under budget. For the fourth straight year there has not been a single new construction contract shipbuilding claim outstanding against the Navy.

- Aircraft carriers. The contract for *Theodore Roosevelt* was modified to include an incentive clause for delivery of up to 14 months in advance of the contract delivery date. The ship was launched in October 1983 18 months ahead of the original schedule and is currently more than $100 million below budget. The FY 1983 multi-ship contract for *Abraham Lincoln* (CVN 72) and *George Washington* (CVN 73) included an acceleration of 44 months for delivery of the ships, and more than $1 billion in cost savings have now been verified. Both ships are under construction.

- *Aegis* cruisers. Bath Iron Works was selected as a second source to compete with Litton for procurement of *Aegis* cruisers. Contracts were signed in December 1983 for the first three cruisers to be competitively awarded—two to Litton and one to Bath. The contracts resulted in a net constant dollar savings of more than $100 million compared to the previous year's sole source award of three ships to Litton. In November 1984, the second year of competition resulted in Bath winning two FY 85 ships and Litton one, with a net constant dollar savings of $97.7 million compared to the FY1984 award.

- Battleships. *New Jersey* was recommissioned in December 1982 ahead of schedule and under budget. *Iowa* was delivered well ahead of schedule and under budget in April 1984 and is now deployed in the Caribbean. *Missouri* was fully funded from contract savings last year and is currently ahead of its reactivation schedule in the Long Beach Naval Shipyard. Planning and preparation is now going forward for the fourth and final reactivation, of *Wisconsin*, with long-lead funding contained in this year's budget request.

- Build/Convert and Charter Programs. Thirteen Maritime Prepositioning Ships (MPS) and five T-5 tankers have been contracted for and are under conversion and construction. The first four MPS ships were delivered during the last six months and two of those four have already participated in logistics exercises. These ships provide a dramatic new capability to preposition the equipment and supplies to support three Marine Amphibious Brigades in areas of potential crisis around the world. The first six of the MPS ships will be completed two months ahead of original schedule and under budget.

- Five years ago 15.7 percent of our shipbuilding program was awarded competitively and 84.3 percent sole source. In the FY 1985 shipbuilding program 84.3 percent of the ships will be awarded competitively and only 15.7 percent sole source.

- For the past two years, all our airframe contracts except the multi-year C-2 contract have been negotiated on a firm-fixed-price basis. The FY 1983 contracts resulted in a savings of 10.3 percent from our original budget estimates. Additionally, those FY 1984 airframe contracts that have been negotiated have resulted in a 3.4 percent reduction in recurring flyaway costs.

- In the major Reagan Administration effort to reinvigorate the maritime industry and the merchant mariner profession, a total of 17 more ships, including cable ships, missile range ships, and fleet tugs, will be offered for contract manning in the current year. This will raise to 51 the total of naval ships offered for contract manning added by this Administration.

- The Navy Department (from FY 1982 to FY 1984) increased by 34 percent in dollar value its awards to small businesses, including women-owned and minority-owned concerns. These contracts to small business totaled $6.1 billion in FY 1984, reflecting a new commitment to bring the benefits of competition and the small business industrial base to Navy procurement.

- The new independent cost estimating organization has been established and has been functioning effectively under the Comptroller of the Navy to independently advise the Chief of Naval Operations, Chief of Naval Material, and Navy Secretariat on program cost estimates.

- A year ago I reported to the committee the establishment of a new Navy Acquisition Reporting System. It has now been functioning for a full year and has been a dramatic success. It involves a new, simple, and straightforward acquisition reporting system for the top 60 programs. It requires quarterly reports on any changes of estimated cost for R&D or production or changes in schedule for

each of those 60 programs and provides early warning of performance difficulties. While this system is primarily meant for senior Navy management, its effectiveness makes it a prime candidate for eventual replacement of the current Selective Acquisition Reporting System.

- Provision of guidance to promotion boards has been modified to increase emphasis on the performance of officers in acquisition management billets.

- Revision of assignment policy for Program Managers and Industrial Facilities Commands. The minimum tour length for officers serving in these important acquisition billets has been lengthened to four years. Arrival and departure from these assignments now is planned to coincide with major Department of the Navy Systems Acquisition Review Council (DNSARC) milestones and/or program starts or completions.

- Increases in manning of Navy Plant Representative Offices. Substantial increases were begun in calendar year 1983, and have continued since, to raise the numbers of naval personnel managing contracts in contractor plants.

- Establishment of BOSS. The Department of the Navy has instituted a spare parts procurement program called "Buy Our Spares Smart" (BOSS). It is particularly frustrating to us to find that the abuses and overcharging uncovered by the Navy itself over the past two years—items for which we recovered monies—are being used by headline-hunting critics seeking to discredit the very effort itself. Working with suppliers and parts contractors, we have made great progress in finding abuses, receiving refunds, challenging sole-source relationships, locating alternative sources, and reducing barriers to competition for spare parts by identifying and eliminating proprietary-data requirements. There are more than 2.3 million inventory items in the Navy's spare parts supply system, and we are methodically re-examining the 1 million under Navy control, over 100,000 of them each year.

Department of the Navy Budget For FY 1986

The Source of the Navy/Marine Corps Budget—Commentators with little knowledge of defense policy have criticized the service budget requests as exercises in simply asking for more programs that have a momentum of their own. Nothing could be further from the truth. As described above, the preparation of the 1986 budget began with the foundation of national strategy and the maritime objectives assigned to the Navy and Marine Corps. From maritime strategy came the force structure planning requirement. Throughout the year, the strategy and the force levels have been refined and tested in multi-national exercises, simulations, and wargaming. As noted earlier, the most important input to the preparation of this budget are the semi-annual assessments of the operational and theater commanders in their net assessments and recommendations for funding priorities. The lessons learned from real-world operations and conflicts such as the Falklands and the Middle East are applied and often further modify the budget planning. From the start of this FY 1986 programming process in September 1983, the application of common sense in placing priority on the "strategy-stoppers" has been applied throughout. Then after exhaustive scrubbing and debate within the Department of Defense and with other agencies of the government, the Department of the Navy budget request has been completed.

Personnel Readiness—The FY 1986 budget continues to place personnel readiness at the top of spending priorities as in the previous four budgets. Nothing is more important than our personnel. The tremendous turn-around in morale and personnel quality and performance has proved to the skeptics that, for the Navy and Marine Corps, the All-Volunteer Force produces a better and readier force for the long term than a peacetime draft. This success, however, depends on the maintenance of adequate compensation and adequate quality of life. Nothing is more important than maintaining budgetary support for those priorities. Our budget request contains the following priority programs:

- A 3 percent pay increase on July 1, 1985, which would be the equivalent of a 4 percent overall increase started at a later date. Together with the 4 percent increase in January 1985 this should stay close to matching the inflation rate.

- Sea Duty Enhancement Programs. Naval service can be arduous, dangerous, and dramatically ill-paid when compared to civilian careers requiring comparable skills. We have been able to bring this into better balance through our sea pay, selective re-enlistment bonus, nuclear officer incentive pay, submarine pay, and special pays. These are continued and adjusted upward in the current budget. We have new initiatives, of particular interest, to correct the injustice currently imposed in reimbursement of travel expenses, by increasing certain reimbursements and weight allowances.

- Increases in end strength. We will continue to add more than 20 ships per year to the fleet from now until 1989. We must have increased end strength to man these ships and our larger numbers of aircraft and support units. Because of Congressionally imposed reductions in the last three years, our end strength increase has not matched the requirements of the ships that have been added. The shortfall has been imposed on the shore establishment and that expediency can no longer absorb further cuts. Our active force end strength must be raised in FY 1986 by 15,000 for the Navy and by 1,200

for the Marine Corps. Reserve force structure also needs expansion. We are requesting an increase of 13,100 Reserve billets for the Navy and 1,262 for the Marine Corps.

- Aviation Officer Career Pay (AOCP). One of the most dramatically successful and cost effective compensation initiatives in Navy history has been the AOCP program. Retention of naval aviators has more than doubled in the last four years of paying AOCP. Pilots and naval flight officers are currently being retained at the rate of 56 percent and 81 percent respectively. Since the inception of the program, 708 additional aviators have remained on active duty as a direct result of AOCP. The resulting cost savings were $578.7 million, which would have otherwise been needed to train their replacements. In addition, the much higher experience level that this bonus has brought us in naval aviation has resulted in the fourth straight record year in naval aviation safety. Since 1981, 126 aircraft have been saved compared to what would have been lost due to pilot error at the accident rate prevailing before the inception of AOCP. This has resulted in a dollar savings of approximately $685 million.

In accordance with the Congressional guidance in the 1985 bill, we have modified the application of the bonus to focus it on those aviation communities where shortages persist. These are principally the seagoing communities, where family separation remains the single strongest factor leading to resignations. The latest tabulation of shortages, by community, appears below:

COMMUNITY		PROJECTED 2ND TOUR INVENTORY	PROJECTED 2ND TOUR REQUIREMENT	PROJECTED DIFFERENCE
VAM/VAQ (MED. ATTACK/ECM)	NFO	163	309	-146
	PILOT	90	209	-119
VAL (LT. ATTACK)	PILOT	166	351	-185
VF (FIGHTER)	NFO	165	317	-152
	PILOT	139	317	-178
VS (CARRIER ASW)	NFO	125	217	- 92
	PILOT	80	150	- 70
HELO	PILOT	558	1194	-636
VAW (CARRIER AEW)	NFO	103	150	- 47
	PILOT	57	108	- 51
VRC (CARRIER LOG)	PILOT	35	150	-115
VQ (ECM/COMM)	NFO	114	175	- 61
	PILOT	67	142	- 75
VP (PATROL)	NFO	399	317	+ 82
	PILOT	387	401	- 14
FORCE SUPPORT	PILOT	40	50	- 10

In each successive year of this bonus, Congress has imposed restrictions and reductions. We have seen a significant drop in the pulling power of this bonus during the past months.

The smaller numbers and the shorter eligibility have reduced the attractiveness of the bonus by an appreciable degree. We have seen a sudden spurt in resignations of pilots, and we believe the time to deal with this problem is right now before it reverses the positive trend of recent years. We will be proposing modifications to the Committee which should increase the attractiveness of the AOCP bonus and eliminate the current loss of entitlement to hazardous duty incentive pay and aviation career incentive pay.

- Nuclear officer incentive pay. Retention of our nuclear-trained officers has improved by 9 percent over the past four years. Nevertheless, 13 and 24 percent shortfalls of nuclear-trained submarine and surface warfare officers remain. The accession bonuses paid to officers entering the program have met with great success. This year we achieved 92 percent of our accession goal. The provision of these pay incentives for nuclear-trained officers must be continued if we are to achieve our goals of manning the nuclear-powered ships with adequate numbers of trained and experienced officers.

- Recruiting and advertising. As the target population for recruiting grows smaller every year and the economy grows stronger, recruiting becomes increasingly more challenging. We have found disturbing survey evidence that youth awareness of Navy programs is declining steadily. Navy advertising acts as a significant tool for recruiting and we are asking for increased funding for both recruiting and advertising.

Material Readiness—Next to personnel, material readiness has received the highest funding priority of all Navy accounts during the last four years. As we move steadily to our 600-ship Navy in 1989, we have maintained funding for material readiness proportionate to the growth in ships and aircraft. The FY 1986 budget should continue to support that proportion and the steady improvement in overall readiness outlined earlier. We are requesting funding, for instance, for the ships' maintenance program to provide for the overhaul of 35 active and six Reserve ships. This is being done at considerably lower cost because of our shifting of overhaul contracting to a more competitive process based on fixed-price bids. It reflects also the carefully engineered extension of operating periods between overhauls for ships and aircraft, and the overhauling of selected systems during shorter regular maintenance availabilities.

- Decentralization and increased accountability for Depot Level Repairable (DLR) components. In a major innovation in the management of maintenance funding, we have instituted a decentralization of the management of DLR components to the ship and the air station level. We are testing financing procurement and repair of DLRs through the Navy Stock Fund starting in April 1985. This initiative establishes a buyer/seller relationship between the stock fund and its customers who in turn are held accountable for their expenditures. In our experience, this brings a much

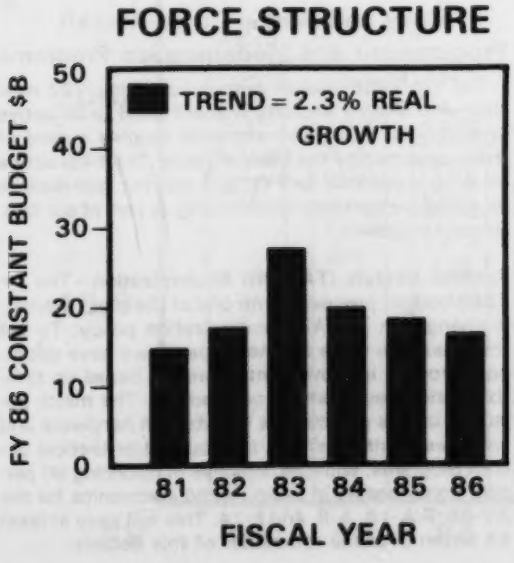
more frugal approach to ordering, based on the truly needy, and an incentive to repair at the lowest authorized level and not waste repairable assets which can be turned in for credit.

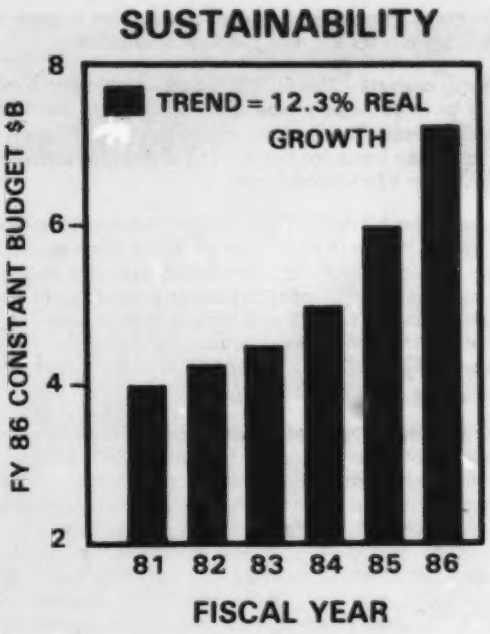
The FY 1986 funding for flight hours represents a 5.6 percent increase over the FY 1985 level, which will provide a level of 25 flight hours per month per air crew.

Ship steaming days are funded at the same rate as FY 1985, adjusted upward for the larger size of the fleet. This figure is based on the required steaming days to maintain readiness and training.

- Aviation support. Planned procurement of Aviation Spare Parts (AVCAL), Aircraft Armament Equipment (AAE), Aviation Weapon Support Equipment (AWSE), and Ground Support Equipment (GSE) must be increased and is included in this budget to allow simultaneous deployment of all deployable aircraft carriers with full capability by 1987.

Ammunition—During the unilateral disarmament of the '70s, ammunition, missile, and torpedo stocks declined to such an extent that four years ago we could not load out the fleet even once. Funding for ammunition has doubled over the last three years and has doubled again in the FY 1986 and FY 1987 programs. The output to the fleet, however, will be much greater than a doubling of delivery rates because we have applied the management reforms outlined earlier. We intend, for example, to have second sources for virtually all requested surface-to-air and air-to-air missiles, ensuring that we will be able to sustain our steady buildup toward inventory requirements at the lowest possible cost. Full funding of these requests is essential if we are to maintain the efficiency and cost reductions we are now achieving through competition and production rates at optimum levels for lowest cost. At the currently funded rates we expect to achieve our full objective for wartime sustainability in these weapons systems by 1989.





Command, Control, and Communications (C3)—Major investment in improving C3 in the naval forces is included in this budget. The long-deferred development of anti-jam communications is a major initiative. In addition, funding is requested for the E-6A TACAMO replacement aircraft.

Shipbuilding

The FY 1986 budget requests 23 new construction ships, and five conversions and reactivations. In the FY 1986 budget we are now dealing largely with the modernization and maintenance of the 600-ship Navy in the '90s, rather than force-building to that number, already achieved during the last four years.

Aircraft Carriers—There are no aircraft carriers in the FY 1986 budget or the five-year projection, and no new-construction carriers are needed until the early 90s. *Theodore Roosevelt* was launched in October 1984 and will become the 14th deployable carrier in 1986. *Abraham Lincoln* will join the fleet in 1989 as the 15th deployable carrier, and *George Washington* will replace *Coral Sea* in 1991.

Battleships—The FY 1986 budget contains long-lead funding for the reactivation of the fourth and final battleship, *Wisconsin* (BB 64).

Trident submarines—The FY 1986 budget contains funding for the 13th *Trident*, which will have a *Trident II* (D-5) missile configuration.

Attack submarines—The FY 1986 budget contains funding for four SSN 688 *Los Angeles* class nuclear attack submarines. It is essential, now that we continue to have both Electric Boat and Newport News producing *Los Angeles* class submarines with great efficiency, that we take advantage of their capacity to produce the numbers required at substantial savings. We estimate that the difference between contracting for four 688s competitively and contracting

for three competitively means a reduction in price of $40 million for each of the four submarines.

Aegis cruisers—The FY 1986 budget contains funding for three *Aegis* cruisers, the 17th, 18th, and 19th of the class. These ships will be competed for on a fixed-price basis for the third straight year between Bath Iron Works and Litton.

Destroyers—The FY 1986 budget contains long-lead funding for the DDG 51 *Arleigh Burke* class destroyers. The lead ship was appropriated last year and we expect to begin competitive series production in two shipyards in FY 1987 and bring in a third yard in FY 1988. These ships are not force-builders, but will replace existing DDG 2 and DDG 37 class destroyers on a one-for-one basis.

Amphibious Ships and Landing Craft—Four years ago we embarked on a program to expand our Marine amphibious lift capability to add assault lift for one Marine Amphibious Brigade. That program is progressing very nicely. All of these ships will incorporate design features to operate the new generation of Marine Corps equipment, such as the CH-53E, the V-22 *Osprey* (formerly the JVX), the AV-8B *Harrier*, the LCAC, and the complete new suite of armor, artillery, and the infantry equipment now entering the Marine Corps' inventory.

LSD 41—The FY 1986 budget contains two LSD 41 *Whidbey Island* class ships, the seventh and eighth of the class. These will be awarded on a fixed-price basis.

LHD 1—The FY 1986 budget contains the request for the first ship of a three-ship multi-year procurement of the new *Wasp* class convertible amphibious V-STOL carrier. Using the lessons learned from the achievements of the multi-ship carrier procurement of 1983, we project savings of more than $820 million in this three-ship procurement.

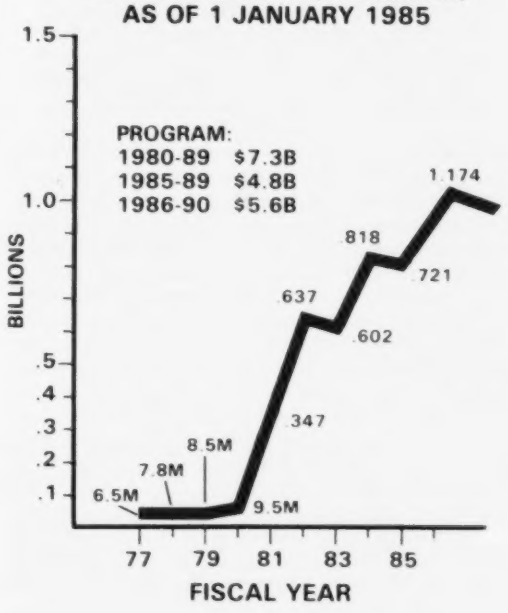
LCAC—The FY 1986 budget requests 12 more of the Landing Craft Air Cushion (LCAC) now being produced by Bell Aerospace Textron. A second-source contractor will be selected this spring. Competitive production by two shipbuilders begins in FY 1986. This is the most revolutionary enhancement of landing craft in Marine history.

Mine Countermeasure Ships—The reconstitution of our mine warfare capability is now in full swing. For FY 1986 we are requesting authorization and funding for four MCM 1 *Avenger* class mine countermeasure ships and four small, less expensive, MSH 1 coastal minehunters. Bell Aerospace Textron of New Orleans won the competition for the production of this new class of ship based on the revolutionary surface effect design. The Reserve-manned Craft of Opportunity Program (COOP) for FY 1986 converts four fishing vessels and two former Naval Academy training craft for use in designated Atlantic and Gulf ports.

Support Ships—The FY 1986 budget contains funding for two more oilers (T-AO) and two more ocean surveillance ships (T-AGOS). These four ships will be awarded through fixed-price competition.

Sea Lift and Maritime Prepositioning—Our budgets for the last four years have included significantly more money for strategic sealift than all previous budgets going back to World War II put together. The FY 1986 budget continues that momentum with funding requested for the conversion of three more auxiliary crane ships (T-ACS) and additional flat racks and sea sheds. We have now had such success with our program to grow the Ready Reserve Fleet from 32 to 77 ships, having recently procured 11 modern RO-RO and break-bulk ships, sufficient to lift an entire Army armored division, for $83 million, that we are expanding our objective to achieve 100 dry-cargo ships, plus additional bulk oil carriers.

STRATEGIC SEALIFT FUNDING
TOTAL PROGRAM ($ BILLIONS)
AS OF 1 JANUARY 1985



Navy and Marine Corps Aircraft Procurement and Modernization Programs

The FY 1986 budget request contains 322 new Navy and Marine aircraft. This will build to an active inventory of 5,700 aircraft, with roughly a third of these operated by the Marine Corps. The 14th active air wing is planned for FY 1987 and the two reserve air wings are currently modernizing as part of our horizontal integration.

Tactical Aircraft (TACAIR) Modernization—The FY 1986 budget proceeds with one of the most dramatic changes in TACAIR modernization policy. To get the maximum value for the taxpayer we have adopted a product improvement approach based on firm-fixed-price development contracting. The major objective of this approach is to establish hardware and software commonality in our four major tactical aircraft programs, with the objective of obtaining 90 percent commonality in avionics and electronics for the AV-8B, F/A-18, A-6, and F-14. This will save at least $4 billion over the remainder of this decade.

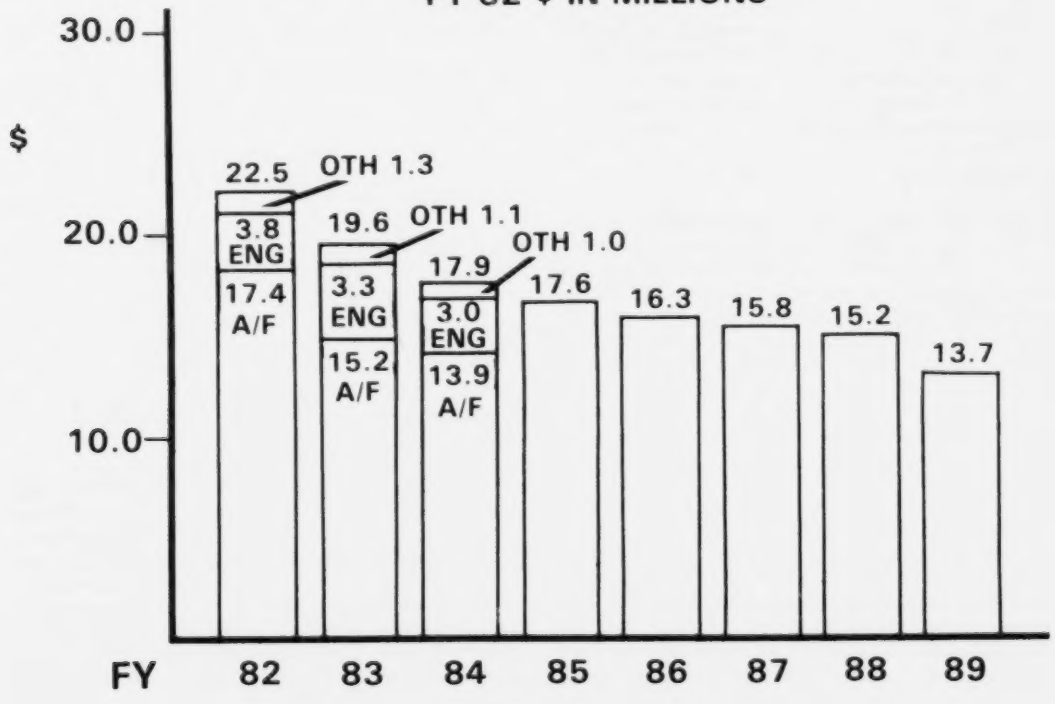
F-14 Tomcat Fighter—We have been able to maintain stability in the F-14A production rate that, along with disciplined management, has brought about actual cost reductions in the airplanes. Unfortunately, the imposition of budget cuts on the President's request of last year has forced the Navy to reduce its requests from 24 F-14s to 18 F-14s and this will result in a price increase because of the lower rate of production. Our funding request includes funds to shift production aircraft from the TF-30 engine to the F-110 engine selected competitively by the Air Force. In addition, funding is included to execute the remarkable firm-fixed-price contract signed last year for the full package development and pilot production of the F-14D. This airplane will include entirely new engines, avionics, survivability features and radar upgrades. First production of the F-14D is planned for FY 1988.

F/A-18 Hornet Strike Fighter—For the fourth straight year we are requesting 84 F/A-18 aircraft. Because of the success of competing this airplane against the F-14 and the A-6E and because of very good performance by the contractors, we have brought the price of the F/A-18 down significantly every year. Its first deployment aboard *Constellation* is now underway and it is still breaking all records for reliability and maintainability. The FY 1986 budget includes funding for the development of an austere all-weather two seat version of the F/A-18A.

A-6 Intruder All-Weather Attack Aircraft—The A-6E continues to prove that it is the best all-weather precision bomber in the world. Based on the inputs of the joint and fleet commanders-in-chief, we have had to

increase the requirement for the numbers of A-6Es in carrier air wings. As a result, we have a significant current shortfall of A-6 aircraft which will grow worse in the years ahead. This problem has been exacerbated by our recent discovery that fatigue life on the A-6E wing will not exceed the contract specification. While all A-6Es are meeting or exceeding to

F/A-18
RECURRING FLYAWAY UNIT COST
FY 82 $ IN MILLIONS



some extent the design specification for wing life, it had been hoped that wing life could be extended as much as 100 percent. That is not possible. We are therefore entering into a competition for the design, production, and installation of a wing for all A-6s designed to last the entire duration of the service life of the aircraft.

Funding is included in this year's budget for the continuation of the firm-fixed-price contract signed last year for the development of a completely modernized A-6F. This aircraft will incorporate the F-404 engines, avionics and survivability features of the F/A-18, and will include a new state-of-the-art dual-mode radar. First production of the A-6F begins in FY 1988.

AV-8B Harrier—The AV-8B has successfully completed its Phase I OPEVAL and we have now signed our second firm-fixed-price contract 8 percent below budget estimates. The FY 1986 budget includes funding for 46 aircraft.

CH-53E Super Stallion—Funding is requested for 14 CH-53E heavy-lift helicopters to begin the first year of a four-year multi-year procurement that will save $102.9 million. Introduction of this aircraft has been highly successful.

SH-60 Seahawk—The SH-60 *Seahawk LAMPS III* helicopter is now in full production. We have executed a firm-fixed-price contract for the FY 1985 aircraft at 15.7 percent below the budget. The FY 1986 budget contains funding for 18 aircraft.

SH-2F Seasprite—The SH-2F *Seasprite LAMPS I* helicopter has been a most successful example of sound business management in reopening a production line that has been closed for 15 years. The FY 1985 contract for six *LAMPS* will be on a firm-fixed-price basis at less than budget. This excellent light-weight helicopter provides extremely valuable capabilities to those ships that will not be modified to operate the *LAMPS III* helicopters, primarily the FF 1052 class and FFG 7 class, and will modernize the Naval Reserve.

AH-1T SeaCobra—The OPEVAL of the AH-1T, re-engined with the T-700 engine, was very successful and it is our intention to incorporate this engine into the FY 1985 production aircraft. The FY 1986 program contains funding for the final 22 aircraft of a 44-aircraft program.

Carrier Helicopter—The FY 1986 budget contains funding to complete development of a helicopter to replace the carrier-based SH-3 *Sea King*. This program embodies both carrier search and rescue requirements and the dipping sonar anti-submarine warfare requirement which is becoming more important in dealing with the Soviet submarine threat. This aircraft will be an austere modification of the existing production SH-60.

V-22 Osprey—The FY 1986 budget contains funding for the continued development of this revolutionary aircraft, formerly known as JVX, now shifted entirely to the Department of the Navy budget for development and production for all the services. One of the most innovative and exciting new aircraft development programs in the world, the program is on schedule and on cost. It will replace the aging CH-46Es and CH-53A/Ds in the Navy and Marine Corps' invento-

ry. In addition, modification of this aircraft will be applied to many other missions in all of the services. We are including from the inception of this program the establishment of two production lines to compete annual production buys in the future.

Adversary Aircraft—The Navy takes delivery of its first no-cost lease of F-21 *Kfir* aircraft from Israel in March. This interim aircraft will provide excellent adversary training until and beyond the delivery of the F-16N aircraft to Navy adversary squadrons. The F-16 was selected in December 1984 in a fixed-price competition and we have signed a contract for 14 aircraft based on prior year funding. The FY 1986 budget includes funding for 12 aircraft.

Other Aircraft—The FY 1986 budget includes funding for 12 utility aircraft, eight C-2s, and 38 T-34C trainer aircraft. The C-2 has been an extremely successful multi-year contract now yielding more than $100 million in cost savings.

Marine Corps Procurement Programs

Maritime Prepositioning Ships (MPS) Brigade Equipment—Funding is requested in FY 1986 for the third MPS Brigade and to continue equipment maintenance, modernization, and exercise funding for the first and second MPS Brigades. The second MPS squadron will replace the Near-Term Prepositioning Force (NTPF) ships during FY 1986, and funding is requested to effect the transfer of equipment and supplies.

Norway Prepositioning—The Marine Corps program for prepositioning selected equipment and supplies in Norway allows a Marine Amphibious Brigade (MAB) to move from the United States to the critical Northern flank of NATO in days, with a minimum requirement for strategic lift.

M-198 Howitzer and Self-Propelled Artillery—The FY 1986 budget contains continued funding for the M-198 to complete replacement of our aging towed artillery pieces with a weapon of significantly greater range, reliability, maintainability, and lethality. Thirty-five are requested in FY 1986.

Infantry Weapons and Other High Priority Programs—The FY 1986 budget contains continued funding for the fielding of infantry weapons to Marine Corps units, especially the new M-16A2 (the best service rifle in the world), the M-249 squad automatic weapon (SAW), and the Shoulder-launched Multi-purpose Assault Weapon (SMAW) (an 83 millimeter rocket launcher).

Assault Vehicle Launched Bridge—This program will eliminate critical shortfalls in our assault river crossing capability. Sixteen are requested in FY 1986.

Oceanography Program—Knowledge of the ocean environment is critical to tactical and strategic force employment. We are now at the threshold of a new era which has the potential for offering explosive growth in our understanding of the ocean. We are taking advantage of this technological opportunity by:

(1) Reinvigorating the oceanography designator as an elite corps;
(2) Investing in more capable equipment such as the Navy Remote Ocean Sensing System (NROSS) and in oceanographic research vessels;
(3) Establishing an Institute for Naval Oceanography to provide the means to integrate newly emerging data from satellites and other varied sources so that it can be readily disseminated to our fleet; and
(4) Increasing our educational commitment within the military and civilian oceanographic community.

We have raised substantially the number of graduate fellowships in ocean sciences for naval personnel, increased the number of academic chairs in oceanography, and strengthened the ocean sciences' technology base. Our FY 1986 commitment in the technology base has been increased by approximately 10 percent to $110 million. The NROSS will allow us to acquire global ocean data for operational and research use by both the military and civilian sectors. Our revitalization of ocean research vessels started in FY 1985 with the procurement of two new deep-survey platforms. Follow-on shipbuilding efforts are planned beginning in FY 1987. The Institute of Naval Oceanography will use a large-scale computer to closely link universities, research institutions, and the Navy in assimilation and use of ocean data from all sources.

Research, Development, Test, and Evaluation (RDT&E) Programs

The FY 1986 request for RDT&E represents 10.8 percent of the Navy's total request. It represents the accomplishment of the pledge made four years ago to streamline and reduce the number of R&D programs and increase the funding where there is high payoff. We have reduced from well over 500 RDT&E programs in FY 1981 to 400 in the FY 1986 budget. A significant proportion of the entire budget is devoted to programs currently transitioning to full-scale development, including the *Trident II* (D-5) missile, the F-14D and A-6F, and E-2C and EA-6A and B aircraft upgrade programs. Also of significance are the continuation of the Submarine Advanced Combat System (SUBACS), the MK-50 advanced lightweight torpedo, the MK-48 ADCAP Torpedo, and the Joint Tactical Information Distribution System (JTIDS).

SSN 21—Continued R&D funds are required for this extremely important new submarine designed to counter Soviet threats in the full range of expected missions well into the 21st century. SSN 21 will be quieter, faster, deeper diving, more heavily armed, and more capable of under-ice operations than today's attack submarines. Authorization for the first ship is planned for 1989.

Advanced Tactical Aircraft (ATA)—The FY 1986 budget includes research and development funding for this follow-on aircraft, intended to replace the A-6 and other aircraft in the late '90s. To ensure maximum commonality with developments in Air Force and Army programs, we have set up a multi-service steering group.

Space—With three-quarters of the Earth's surface covered by the seas, the Navy has always had a priority interest in the maritime dimension of space. Naval operations are increasingly dependent on space systems strategically, tactically, and in peacetime. Nearly 85 percent of all operational satellite system outputs provided to the Armed Forces are used by the Navy. The coordination of military service and civilian agency activities in space has been remarkably smooth and successful. The establishment of the Naval Space Command in Dahlgren, Va., in 1983, has greatly improved the management focus of Navy efforts in space.

Navy and Marine Corps Reserves

Four years ago the Department of the Navy undertook a major reorganization of Reserve components to move from a vertical to a horizontal relationship with the active forces. That means essentially that the Reserves must provide immediate augmentation to the active force in time of emergency across the entire spectrum of warfare. It means also that, in peacetime, we rely on Selected Reserves to provide real-time fleet support across their mission areas. To execute this common-sense policy, the Reserves must have equipment compatible with the active forces. For instance, instead of providing the Reserves only such equipment as becomes obsolete and is removed from the active force, there must be a spectrum of new and old equipment reflected in the Reserves parallel to and in the same proportion as that in the active force. We have taken fundamental steps to bring this about.

- Modern FF 1052 and FFG 7 class frigates have been transferred to the Naval Reserve Force with a total program of 26 frigates planned by 1990.
- The first Reserve squadron has now transitioned to the F/A-18 and another squadron to the F-14A.
- Modern A-7E, E-2C, SH-2F, and HH-60 aircraft have been or are being transferred or acquired for Reserve units this year, with other fleet aircraft to follow during the current five-year plan.
- Squadron augmentation flying units have been established and have been operating successfully with each active duty air wing, providing current-trained aviators and maintenance personnel for immediate augmentation to active duty squadrons.

The Naval Reserve contains several components which only exist in the Reserves: 100 percent of the Navy's U.S.-based logistics support squadrons; 100 percent of light-attack helicopter squadrons; 100 percent of our combat helicopter search and rescue capability; 100 percent of naval mobile inshore/undersea warfare units—"the brown-water Navy"—structured for combat on inland waterways. Upon mobilization the Reserves provide 99 percent of naval control of shipping organization manning for merchant ship mobilization and convoy formation for overseas operations; 86 percent of our oceangoing minesweepers; 86 percent of the cargo-handling battalions vital to port management and loading operations in combat theaters; 85 percent of Military Sealift Command military personnel; 68 percent of Naval Mobile Construction Battalions, the famed Seabees; 66 percent of special boat forces; 35 percent of maritime antisubmarine warfare patrol aircraft squadrons; 34 percent of naval intelligence personnel; 30 percent of medical support personnel; 22 percent of ASW helicopter squadrons needed for fleet and convoy antisubmarine defense efforts; and 14 percent of our tactical sea-based aviation capabilities.

The Marine Corps relies heavily on a fully trained and capable Reserve component to complement its active force. The Marine Corps' division/wing team (the 4th Marine Division/Aircraft Wing Team) comprises one-fourth of our total Marine Corps combat structure and one-third of total Marine Corps manpower assets. The Reserves provide 40 percent of Marine tanks; 33 percent of heavy artillery; 30 percent of the light attack aircraft; and 33 percent of the antiaircraft missile capability.

It is not often realized how fully integrated our Navy and Marine Corps Reserves are becoming in our active force structure and peacetime operations. Naval Reserve C-9 transport aircraft made many trips in support of our Marines ashore in Beirut during 1983 and 1984, and provided direct support to our operations in Grenada during the same period. As another example, the Ready Reserve provided 349 volunteers for three-week tours of duty aboard the battleship *New Jersey* during its 11-month deployment, enabling most of the crew to rotate home for leave.

A most successful new initiative begun in 1983 was the Sea/Air Mariner program that now provides

10,000 first-term enlistments per year directly into the Naval Reserve. We are beginning a similar program this year for junior officer accessions directly into the Reserves in both the Navy and the Marine Corps.

Conclusion

The progress outlined above and the programs proposed for the future should be a source of much pride to this Committee and to Congress as a whole. It is strong testimony to the proposition that Congress and the Executive Branch not only can work together, they can achieve dramatic results in a very short period of time. In four short years we have made a real change already in the global maritime balance. We have increased available ship days 40 percent for submarines and 20 percent for surface combatants. No longer do we have a one-and-a-half-ocean Navy for a three-ocean commitment; no longer do we have ships that cannot deploy on time for lack of trained sailors; no longer do we have a hemorrhage of talent from our career forces; no longer do we have an unending spiral of cost overruns and escalations; no longer does the world perceive the United States as a declining world power. The modest 7 percent average increase in the Navy budget for the last four years has paid enormous dividends and provided capabilities many times more than that increment.

The President, the Secretary of Defense, and the Department of the Navy have not wavered from the priorities and commitments made four years ago to achieve maritime superiority. We have every confidence that Congress will demonstrate the same constancy of purpose, rejecting the arguments of those who would ignore the lessons of the '70s. We simply cannot afford to start again down that road of no-growth budgets, pay freezes, and the destruction of competition, which brings us ultimately to the dead end of an impaired national security.

Today, we hear once again the popular but false wisdom that in a period of high interest rates and deficits, the defense budget simply must be cut. Sometimes this pernicious reasoning is even carried one step further and it is alleged that the buildup of America's military strength is actually weakening the United States' economy.

History itself is the best refutation to the argument that budget deficits necessitate a cut in defense expenditures. Today's economic problems do not even approach the era of the recent depression, when the British, French, and U.S. governments cut military expenditure to the bone in the name of fiscal prudence. The resulting lack of Western preparedness contributed in no small measure to World War II, the war Churchill called the most avoidable of all wars.

When the Axis powers were finally defeated in 1945, 60 million people had died, almost 300,000 of them Americans. The war consumed nearly 40 percent of the U.S. Gross National Product. If World War II were to be fought again, at 1985 prices, the price would exceed $4 trillion.

Those who would argue that defense spending should be curtailed in times of deficit should ponder the cost of war itself, should deterrence fail for want of adequate preparedness. A significant portion of today's federal debt represents the unpaid bills, with interest, that we still owe on World War II. Our war debt has never been liquidated, only rolled over. Funded for the most part by 30 year 2 1/2 percent war bonds, the principal remains unamortized today at much higher interest rates. Strong national defense does not come cheaply, but as we learned four decades ago, it is far less expensive than the war which weakness invites.

Another specious rationale maintains that "the biggest deterrent to the Russians in a healthy economy in America." It is doubtful that the Politburo will defer plans to foster revolution and turmoil in Central America because the U.S. trade balance is improving or economic productivity is rising.

We are fortunate to have in the President and the Secretary of Defense and in positions of responsibility in Congress, leaders who understand the truly incalculable cost of war in terms of human sorrow and suffering. They recognize that, above all others, national defense is the first and most vital of all government services. For if the people, through their government, cannot "provide for the common defense," we can provide for nothing else.

ADMIRAL JAMES D. WATKINS
CHIEF OF NAVAL OPERATIONS

James David Watkins was born in California on March 7, 1927. A 1949 graduate of the U.S. Naval Academy, he served in destroyers, then submarines. He received a masters degree in mechanical engineering from the Naval Postgraduate School in 1958 after completing the reactor engineering course at the Oak Ridge National Laboratory.

From 1960-62, he served as executive officer of the nuclear-powered attack submarine USS *Snook* (SSN 592). Later, from 1964-66, he commanded the same submarine, participating in the first visit of a nuclear-powered ship to Yokosuka, Japan, during that tour. Between these two tours of duty, he was assigned to duty in the office of manager naval reactors, Atomic Energy Commission. By 1967, he had left submarines and served as executive officer of the nuclear-powered guided missile cruiser USS *Long Beach* (CGN 9) during two Gulf of Tonkin deployments in which *Long Beach* participated in shooting down five North Vietnamese enemy aircraft, two by long-range missiles.

He was then ordered to duty in the Bureau of Naval Personnel and became director of the nuclear-trained personnel branch. After selection to rear admiral in 1971, he was again assigned to duty in the Bureau of Naval Personnel as director of enlisted personnel, the first flag officer to be so assigned.

In September 1973, he was ordered to duty as Commander, Cruiser-Destroyer Group One, subsequently commanding Cruiser-Destroyer Force, U.S. 7th Fleet, as well as a surface task group which deployed to the Indian Ocean in 1974. In December 1974, he was nominated for promotion to vice admiral and, in April 1975, was appointed Deputy Chief of Naval Operations for Manpower and Chief of Naval Personnel.

In September 1978, he was ordered to duty as Commander, 6th Fleet, also assuming NATO duties as Commander, Naval Striking and Support Forces Southern Europe. In April 1979, the President nominated him for appointment to the grade of admiral and as Vice Chief of Naval Operations. He served as Commander in Chief, U.S. Pacific Fleet from July 31, 1981 to May 28, 1982. Admiral Watkins was nominated in March 1982 by President Reagan to succeed Admiral Thomas B. Hayward on June 30, 1982, as the 22nd Chief of Naval Operations.

Admiral Watkins married Sheila McKinney of San Diego, in 1950. They have six children: Katherine, Laura Jo, Susan, Charles, James Jr., and Edward. His brother, retired Captain George C. Watkins, USN, was a graduate of the Naval Academy, class of 1944. His son Charles is a 1977 graduate of the Naval Academy. His son Edward is in the NROTC program at the University of California, Berkeley campus, class of 1985.

A Report By Admiral James D. Watkins, U.S. Navy Chief of Naval Operations On The Fiscal Year 1986 Military Posture and Budget of the U.S. Navy

Mr. Chairman and distinguished members of the Committee, I am grateful for the opportunity to appear before you today to report on the status of our Navy. It is the finest Navy in the world and more capable of fulfilling our national security objectives than at any time during my 40 years of service. This capability has never been more crucial, for the challenges to peace have never been more complex and demanding. We must contend with threats which range from low-level conflict and terrorism to strategic nuclear war. There is no indication this situation will improve in the foreseeable future.

Four years of Congressional and public backing have indeed made a remarkable difference. Our posture has improved dramatically over the past few years. In 1980 we had 479 ships in the fleet and were

barely able to meet our peacetime commitments. Deficiencies in readiness prevented some ships from operating at all. In just four years we have added 44 ships to the fleet and readiness has improved markedly. Stocks of munitions, spare parts, and other essentials of sustainability continue to approach desired levels.

But of all the elements that constitute the Navy's enhanced posture, none is more important than the character of the men and women who serve. Our sailors today exhibit a renewed spirit and vigor that forms the cornerstone of renewed naval strength. Like their fellow countrymen, Navy men and women feel good about being Americans and reflect a patriotism and deep sense of commitment to country which is truly inspiring. Over the past several years, programs to rebuild a once mislaid sense of pride and professional competence have paid off handsomely and have been complemented by the patriotic spirit which I described. We have set exacting standards and demanded a great deal of our sailors, and they have responded magnificently. The U.S. Navy is the finest in the world because its sailors are the finest. They are proud of their country and their profession; they are good at what they do; they are dedicated and self-sacrificing. They deserve your support.

Revived patriotism alone does not recruit and retain sailors. The Navy's personnel picture is sound today, but a growing economy increasingly competes for the talented people we need. America's young people, perhaps more than ever, demand the opportunity for upward mobility and economic advancement, and if they do not find it in the Armed Services, they will seek it elsewhere. Already, we sense disturbing trend indicators on the horizon. Providing continued support for military pay and benefits programs is one of the most important budgetary issues we face this year.

Before addressing budget issues, however, I will review the Navy's key role in support of national security policy, focusing on the nature of the "violent peace" we face and the unique contribution of naval forces in controlling crises and deterring conflicts across the entire spectrum of violence. I also will describe certain naval operations and exercises over the past year, vivid examples of these unique contributions. The Navy was at sea in large numbers every day of the year in support of U.S. policy and military strategy of deterrence. We tested plans to keep America free and at peace in war games, exercises, and actual operations. Finally, I want to discuss some key issues facing the Navy today and describe in detail plans to apply the resources you provide.

Today's capable Navy would not have been possible without strong Congressional support. Your continuing support is necessary to sustain progress. I want to make special note of how keenly we recognize our obligation to be responsible stewards of resources you provide. I think it will be clear that America's commitment to a stronger defense is well founded and well managed. Increased funding has produced tangible results, and your continuing confidence and support are warranted.

Nature Of The Challenge: An Era Of Violent Peace

United States' national security policy is designed to preserve freedom, with institutions and values intact. We are a global power with global interests and obligations. We live in a world with manifold threats to U.S. interests and must deal with a wide range of threats to freedom. Earlier, I mentioned the continuum of threats from low-level violence to nuclear war, from terrorism to major conventional conflict. At the upper end of the spectrum, demarcations between peace and war are clear, and America today is at peace. But at the lower end of the continuum, differences between war and peace are blurred. Our forces deployed in their traditional roles of presence and crisis response live daily with the threat and reality of violence from a variety of sources. America is at peace, but it is a violent peace.

A principal feature of this era is the continuing and widespread existence of localized conflicts and crises, mostly in the Third World, but often with global implications. This past year alone, millions of people were involved in over 30 armed conflicts throughout the world. These ran the gamut from civil unrest in Sri Lanka, to insurgencies in Central and South America, to civil war in Chad, to direct conflict between states in the Persian Gulf.

These conflicts, and a number of other crises with the potential for armed conflict, frequently involve interests and commitments of major world powers. These confrontations often transcend interests of states directly involved and serve as backdrop for potentially more serious conflicts between major powers. Indeed, a fundamental component of the Navy's ability to deter war with the Soviet Union is our ability to stabilize and control escalation in Third World crises.

The profusion of crises and conflicts has been a feature of the international environment since World War II. Potential crises and the aftermath of crises have increasingly defined the location and character of our forward deployments. We now maintain a continual presence in the Indian Ocean, Persian Gulf, and Caribbean, as well as our more traditional forward deployments to the Mediterranean and the Western Pacific. Although technically we are at peace, our operating tempo is about 20 percent higher than during the Vietnam War. The Navy is on the front lines of today's violent peace, and I see little likelihood of significant improvement in the foreseeable future.

The causes of today's conflicts and crises are almost as numerous as the conflicts themselves. Many, unfortunately, are rooted in ancient and unresolved hostilities between religious, ethnic, and social groups. Others are caused or exacerbated by economic and attendant political instability, as well as actions of totalitarian and aggressive governments. Despite efforts of dedicated and skilled negotiators, crises and conflicts probably will continue.

While not always the principal cause of these conflicts, the Soviets frequently exploit instability in the Third World to promote creation of Marxist governments, improve their strategic position, and reduce Western influence. Soviet methods have included indirect support and encouragement of limited warfare by Cuban, Syrian, Libyan, and North Korean proxies as well as direct Soviet crisis response by their own forces. Since 1948, the Third World has been the most common arena for U.S.-Soviet competition. This pattern, too, will continue. U.S. interests and commitments are worldwide, and increasingly focus on the Third World. Our economy and security require not only oil from the Persian Gulf and Caribbean, but strategic minerals from southern Africa. Our trade with

nations of the Pacific Basin now exceeds that with Europe. Obviously, we have vital stakes in what happens in these and other key areas.

In this era of violent peace, traditional challenges to peace and stability which I just reviewed have been compounded by several trends including increased Soviet capabilities for global military reach, a proliferation of modern weaponry in the Third World, and the rise of international terrorism. I would like to address these complications.

The Soviets have steadily built a capacity for global military reach. Their military airlift has gradually increased. Sea lift has grown substantially with addition of modern amphibious shipping plus dramatic expansion of the Soviet merchant fleet. The Soviet Navy, with V-STOL carriers today and a large-deck nuclear-powered carrier under construction, is increasingly capable of sustained distant operations. Additionally, the Soviets have continued to expand and improve their attack submarine force, making it a formidable, global threat. They also have enhanced their global reach by access to air and naval facilities in key strategic locations, including Ethiopia, Yemen. Cuba, and Vietnam.

Most importantly in this regard, Moscow has recently established its first fully developed overseas base at Cam Ranh Bay, Vietnam. Those facilities can now independently support a large concentration of Soviet naval forces, maintaining a permanent naval force astride key sea lanes to our Pacific allies and friends. Cam Ranh Bay forces can strike key U.S. and friendly forces and installations as far north as Hong Kong. These changes in Soviet military reach have occurred in a region where Moscow's presence was negligible only two years ago.

Improved power projection forces and global access provide the Soviets a growing capability to intervene militarily in the Third World. They steadily improve their ability to sever vital Sea Lines of Communication (SLOCs) while improving their ability to counter U.S. crisis reaction moves. U.S. naval forces deployed to areas of crisis often find themselves in company with increasingly capable units of the Soviet Navy. Responding effectively to Third World crises may well require that U.S. Navy units bring the range of capabilities necessary to deal with Soviet as well as Third World threats.

The continuing proliferation of modern, high-technology weaponry further complicates Third World instability. Certainly the most alarming aspect of this proliferation is the growing number of nations in a position to acquire weapons of mass annihilation—chemical, biological, even nuclear. Even in the absence of such weapons, impressive conventional arsenals possessed by Third World nations pose an immediate concern; Libya is a case in point. While these weapons do not fundamentally change the causes of instability in the Third World, they do change the nature of conflict and the threats we face. Naval forces must be prepared to encounter high-technology, combined arms threats in virtually every ocean of the world.

The rise of state-sponsored terrorism has created a new and most disturbing element of violent peace. Although we are at war with no nation, various groups have proven themselves ready to strike at us and other free nations with murderous effect. Terrorism's unpredictability, worldwide scope, and anonymity render it one of the most insidious threats we face today. Terrorism is not new, but the threat has increased because terrorism has become a preferred arm of state action in some cases. Evidence exists that several nations sponsor terrorist training camps on their soil and send forth agents of murder and destruction as an element of national policy.

The significance of terrorism lies not only in the fact that it takes innocent lives, but also that it is yet another point on a broad continuum of conflict. International terrorism threatens our forward defense. Placing at risk our forward-deployed forces, terrorists seek to paralyze our employment of these forces, undermine our commitments abroad, and intimidate us into withdrawing.

This brief survey of the world scene is by no means comprehensive, rather it highlights two important developments which the Navy faces every day in our forward-deployed role: terrorism and an era of violent peace. In facing these challenges, we contribute in a significant and unique way to deterrence at all levels of the continuum of conflict.

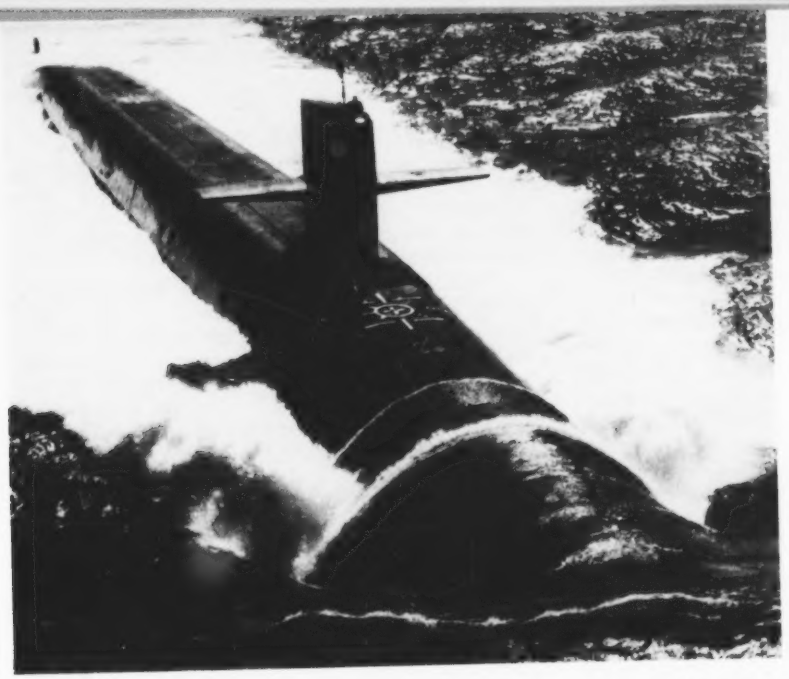
Role Of The Navy — Demonstrated Deterrent Value

The fundamental task of U.S. military forces is to deter war and preserve peace. Hence, our strategy is based on deterrence, forward defense, and alliance solidarity. The Navy's demonstrated deterrent value across the entire continuum of potential conflicts is based on forward deployments and flexibility. Our maritime strategy recognizes and depends on close cooperation with allies and sister services. These principles infuse every aspect of force structure, strategy, and operations.

Deterrence is most often associated with discussion of strategic nuclear warfare, where strategic submarines have proven to be a most credible deterrent for over two decades. Yet, deterrence is much broader. To protect national interests, we must deter threats ranging from terrorism to nuclear war. This requires a credible preventive and reactive capability at the level of conflict we seek to deter. Our national interests further require an extended deterrent capability. We must deter coercion and military attack not only against the U.S., but also against allies, trading partners, important resources, and U.S. interests and installations worldwide. Perhaps most importantly, protecting national interests while preventing war, particularly nuclear war, requires an ability to control escalation. We seek to deter a threat at a particular point on the spectrum of conflict, but when deterrence fails, we seek to control escalation.

Naval forces provide credible, capable deterrence at any level of potential conflict, they exercise this capability worldwide in support of an extended deterrence posture, and they provide precise and graduated responses necessary for escalation control. The evidence is a matter of record; the Navy, together with the Marine Corps, has played a central role in deterrence, and has provided escalation control in an exceptional range of situations and at different levels of potential conflict.

The cornerstone of national security policy is nuclear deterrence and, at the strategic deterrence level, the Navy has provided a survivable submarine ballistic missile force. Today, as *Trident* SSBNs enter the fleet in growing numbers, this element of deterrence increases in importance. The *Ohio* class submarines' ability to disappear in the world's oceans, combined



with the range and accuracy of the *Trident* C-4 missile today and the D-5 in the near future, makes this force resistant to preemption and capable of assured and effective retaliation. These magnificent ships have shown consistently superb operational results.

The nuclear variant *Tomahawk* land attack missile (TLAM/N) complements the strategic deterrent of our SSBN force. Planned for surface ships and submarines, TLAM/N provides a significant new capability to deter escalation to nuclear war in any theater, as it possesses the inherent worldwide mobility and survivability of naval forces. In addition, it makes a major contribution to deterrence through its role in the theater nuclear reserve.

Another equally significant Navy contribution to deterrence lies outside the nuclear context, at the level of conventional conflict and crisis response. Every day, forward-deployed naval forces operate worldwide preventing onset of crises or outbreak of hostilities which could threaten our global interests. When crises occur, naval forces limit and stabilize the crisis, discourage escalation, and deny any opportunities to Soviet or proxy forces.

The Navy plays a particularly important role in the event of a broad conventional conflict with the Soviet Union. Our alliances are ocean alliances, and the Navy's ability to maintain SLOCs will ensure that the Soviets cannot partition the allies and achieve a quick victory. Moreover, striking power of forward-deployed naval forces will be essential to controlling escalation and terminating conflict on terms favorable to the U.S.

Crisis response has long been the business of the Navy and Marine Corps. Between 1946 and 1982, in some 250 instances of employment of American military forces, naval forces were used about 80 percent of the time. Reasons for selecting naval forces as the instrument of choice for crisis management and deterrence of conflicts are illuminating:

- Forward-deployed posture and rapid mobility make naval forces rapidly available at crisis locations worldwide, providing significant deterrent value and reducing the likelihood of ambiguous or short warning.
- Naval forces maintain consistently high states of readiness due to forward deployments, ensuring operational expertise and day-to-day preparedness.
- Naval forces increasingly operate with Armed Forces of our friends and allies. We now routinely operate with our sister services in joint operations and exercises.
- Naval forces can be sustained indefinitely at distant locations, with logistics support relatively independent of foreign basing or overflight rights.
- Naval forces bring the range of capabilities required for a credible deterrent. Capabilities demonstrated in actual crises include maintaining presence, conducting surveillance, threatening the use of force, conducting naval gunfire or air strikes, landing Marines, evacuating civilians, establishing a blockade or quarantine, and preventing intervention by Soviet or other forces.
- Perhaps most importantly, naval forces have unique escalation control characteristics that contribute to effective crisis control. Naval forces can be intrusive or out of sight, threatening or non-threatening, and easily dispatched but just as easily withdrawn. The flexibility and precision available in employing naval forces provide important escalation control in any crisis, but have particular significance in crises which might involve the Soviet Union. The Navy remains keenly aware of its crucial role in this area and has devoted increasing attention to employment of naval forces in this capacity.

Our experience leads to the following observations:

- Deterrence requires forward-deployed forces, both for preventive and reactive reasons. Current commitments to extended deterrence and the potential range of crises require a balanced 600-ship Navy.
- Deterrence requires ready and sustainable forces, implying continued emphasis on our readiness and sustainability programs.
- Deterrence requires capabilities adequate to the threat. Increasing Soviet global reach and proliferation of modern weaponry demand the highly capable forces we are now building.
- Finally, deterrence requires an ability to cope with all levels of the conflict continuum including international terrorism.

In summary then, I reiterate my two principal themes:

• First, we live in an era of violent peace, characterized by a continuum of potential conflicts and violence.

• Second, the Navy operates in the front lines of this violent peace in our everyday, forward-deployed role worldwide, continuing to demonstrate deterrence across the spectrum of potential conflict.

Naval Operations

This past year provided clear examples of the challenges of an era of violent peace and the Navy's role in meeting those challenges. As the year dawned, turmoil in the Mideast continued to boil as conflict continued in Lebanon, the Iran-Iraq War entered its fifth year, and terrorist attacks continued against Israel. Then came mining of the Red Sea last summer. In north Africa the Chad-Libya conflict continued sporadically. Unrest in Central America continued with open conflict in El Salvador. Unfortunately, this level of violence during peacetime has become so commonplace that we tend to overlook the potential for these events to escalate, spread, and lead to direct superpower confrontation. Fortunately, conflicts this past year did not bring the superpowers to a face-to-face confrontation and did not expand. The year ended without erosion of our global posture, and the Navy again played a key role in safeguarding U.S. and allied interests.

The recent deployment of the aircraft carrier *Independence*'s battle group and accompanying Marine Amphibious Ready Group (MARG) provides a dramatic example of the flexibility and utility of naval forces in this period of violent peace. When the battle group and MARG steamed from Norfolk in the fall of 1983, they expected their first operation to be a Mediterranean exercise. But only a few days out of port, acting on the request of eastern Caribbean nations to move forces to the vicinity of Grenada, the National Command Authority transmitted a "turn starboard" signal. The Navy-Marine Corps team responded magnificently and was a key element in the Grenada rescue mission.

Only eight days later the *Independence* battle group and MARG were off again, headed for the eastern Mediterranean. Upon arrival, the force took up the support mission to Lebanon, a mission complicated by the tragic loss of 241 brave Marines and sailors a few weeks earlier. In Lebanon, though odds were clearly against us, the United States was trying to give peace and stability a chance.

Independence's (CV 62) reconnaissance flights, flights requested by the legitimate government of Lebanon, were fired on by Syrian-backed forces. The situation was untenable and action was required to silence those hostile forces. Again, the *Independence* battle group's performance was superb when put to the test.

Also off the coast of Lebanon, the wisdom of past Congressional decisions to recommission *Iowa* class battleships and to build *Ticonderoga* class cruisers became manifest. After the tragedy of the suicide bombing of the Marine barracks in Beirut, you will recall that the Secretary of Defense dispatched the battleship *New Jersey* (BB 62) to waters off Lebanon. In the weeks preceding *New Jersey*'s arrival, cruisers, destroyers, and frigates provided naval gunfire support to silence hostile fire aimed against our Marines. Their accurate, effective gunfire demonstrated our resolve not to let direct acts of aggression go unanswered. The battleship's presence, however, greatly increased the firepower and underscored the fullness of our commitment. When that magnificent "Battle Wagon" arrived, after having been recommissioned at less than

the cost of a new frigate, she carried a powerful message both to those who would fire on our Marines and to the Marines themselves. As one young Marine, who served in Beirut while *New Jersey* was off the coast, put it: "To Marines who need gunfire support, a battleship is like one of those famous credit cards—don't leave home without one." *New Jersey* proved the quality of her original construction and modernization; during her first deployment, which lasted nearly a year, she steamed without a single debilitating casualty.

Ticonderoga (CG 47) first deployed last year, just nine months after commissioning, to the eastern Mediterranean where she operated in the task force with *New Jersey*. "Tico's" performance was outstanding in all respects. Her *Aegis* weapons system, the most sophisticated Anti-Aircraft Warfare (AAW) system in the world, provided a complete and comprehensive air picture of such unprecedented quality that Commander Task Force 60 reported a substantial drop in Combat Air Patrol requirements. This meant a significant aviation fuel savings for the carrier's air wing. Concern over suicide aircraft attacks was alleviated by the complete air picture *Ticonderoga* provided. We had our guard up and were prepared to react to any attempted attack.

Not far from Lebanon, those bent on fomenting more unrest in the Mideast mined the Red Sea. Again, naval forces deployed to help locate and eliminate the mines which were hazarding international shipping approaching the Suez Canal. The dock landing ship *Shreveport* (LPD 12) and her mine-clearing RH-53 helicopters responded on short notice and in cooperation with other navies successfully cleared the sea lanes. The operation also included a second contingent of RH-53s specifically requested by Saudi Arabia to clear sea areas of special interest to the Saudis. As yet another indication of the flexibility of naval forces, *LaSalle* (AGF 3) flagship of Commander Middle East Force, was directed to the Red Sea to support the RH-53s.

While the Iran-Iraq War continued, a Navy battle group remained on station in the northern Arabian Sea and naval forces, including modern destroyers and frigates, continued to operate in the Persian Gulf. These forces provided constant reminder to belligerents and neighboring states of U.S. resolve to prevent the conflict from spreading and to affirm U.S. commitment to maintain vital SLOCs in the region. Our attack submarine force continued its high-tempo operations demonstrating an ability to deploy on extremely short notice in both fleets.

These selected examples highlight the Navy's continuing support of our country's national security objectives. Your Navy is at sea, forward deployed every day of the year doing many of the same things we would do in war. Indeed, by maintaining our forward-deployed status, we help keep the peace we so cherish.

On any given day this past year nearly one-third of the Navy was underway. We conducted presence operations off the coast of Central America, monitoring possible arms shipments to that troubled part of the world. Exercises in the Caribbean demonstrated our resolve to support neighbors and allies in this hemisphere. We helped stem the flow of illegal drugs into the U.S. by drug interdiction operations. Navy support of a major U.S. Coast Guard drug interdiction operation in the Caribbean last November and December, Operation Wagon Wheel, resulted in the seizure of 23 vessels. The Navy deployed to the Mediterranean fulfilling NATO obligations and reaffirming our commitment to key allies. Deployments to the Indian Ocean and Arabian Sea reminded the world that we will maintain key SLOCs leading from the Persian Gulf. A task force circumnavigated South America and visited west African nations demonstrating our ties to the South Atlantic region. The 7th Fleet operated in the Western Pacific, demonstrating recognition of the strategic importance of economic and political ties in the burgeoning Pacific Basin. Of course, the submarine ballistic missile force maintained a continuous and invulnerable vigil ensuring strategic deterrence.

More than half of our sailors are assigned to sea duty and accept long periods of separation from their families and loved ones. Indeed, sailors assigned to aircraft carriers are away from their families over 70 percent of the time. Yet, despite these arduous conditions, nearly 60 percent of first-term enlistees decided to re-enlist last year. Many of these young sailors are highly trained technicians with good civilian job opportunities. Why do they re-enlist? No doubt there are many reasons. But without professional and competent leadership, they would not have opted to continue their service. The superb leaders in today's Navy are an indispensable factor in our performance.

We are not resting on past laurels. We continually develop and test new tactics and refine strategies. Ships at sea conduct training to polish their tactical proficiency. For example, three aircraft carriers operated as a single battle force in the Pacific last fall to train in employment of multiple carriers. After completing such training exercises, we carefully analyze data collected in an effort to find improved procedures or tactics. We are not a static force. Even in port, crews conduct exercises through very realistic, high-technology simulation techniques. And at the Naval War College we carefully refine strategy and tactics to enhance operational effectiveness.

I am quite proud of the initiatives we have taken at the Naval War College. Naval officers now recognize it as the crucible for strategic and tactical thought—just as it was under Admiral Alfred Thayer Mahan. Almost all of our commanding officers now attend the War College upon completion of their command tours. This allows us to provide benefits of the very latest strategic and tactical experience to more junior students at the War College. We also have invigorated the Wargaming Center collocated at Newport, R.I. The Center is the most advanced such facility in the world, allowing us to test alternative strategies and tactics. We conducted 43 war games at the Naval War College during 1984. There was not a single day last year when the Center was not conducting or planning a war game.

Let me make one more important point about the Naval War College. Each year we select six Navy captains and two Marine Corps colonels who have distinguished themselves as outstanding strategists and tacticians. These officers form the Strategic Studies Group and spend a year dealing with some of the toughest tactical and strategic issues. They report directly to me.

We place great emphasis on joint operations with our sister services. In addition to our historic and unique partnership with the Marine Corps, we have over the past several years strengthened our partnership with the Air Force, Army, and Coast Guard in

planning, exercising, and executing joint operations. An important part of our cooperative effort has been the Memorandum of Agreement (MOA) which I signed with the Chief of Staff of the Air Force in September 1982, This MOA accelerated such ongoing efforts as routinely including Air Force units in fleet exercises, developing doctrine and procedures for employment of AWACS and B-52s in maritime missions, and identifying aerial refueling requirements. The MOA also led to several new initiatives such as data link and communications interoperability, and joint air combat training ranges. Another example of our cooperative efforts with sister services to correct warfighting deficiencies is the Memorandum of Agreement which I signed with the Commandant of the Coast Guard establishing Maritime Defense Zones (MDZs). Under this MOA, Coast Guard units combined with naval forces, both active and Reserve, will defend harbors and shipping lanes along our coasts in time of war. Navy-Coast Guard planning continues for the most efficient and effective use of MDZ forces to ensure adequate coastal defense. The Navy is also supporting the Memorandum of Agreement signed last year between the U.S. Army and U.S. Air Force. We have identified 11 areas in that MOA in which we can contribute to enhanced joint operational effectiveness, and we are pressing ahead to do so. Efforts like these complement vigorous Joint Chiefs of Staff efforts, including JCS-directed joint exercises and pilot projects on tactical and strategic air support to maritime operations.

In summary, because of their daily involvement in actual operations, at-sea exercises, and war games, the men and women who lead the Navy today are creative tacticians and thoughtful strategists. They have indeed been honed in real-world experiences of maintaining our freedom in a violent world. These leaders not only ensure our ability to deter conflict and protect U.S. interests today, they also develop the capabilities which will assure a similar posture in the future.

The Navy Today

Last year and the year before, I reported to you on my positive views regarding "...the current state of the Navy because of the favorable trends..." made possible by your support. I am pleased to report that those trends have continued. I am particularly pleased with steady, dramatic improvements in readiness and sustainability. This improvement reflects in large measure careful husbanding of resources and improved management techniques.

Management: The Good News

For the past two years I reported to Congress on our efforts to improve management policies and practices. We again made substantial improvement in 1984, but our very real progress is too often lost in the glare of publicity accorded instances of mismanagement, practices normally discovered and remedied by the Navy. One reads about $426 claw hammers and $100 diodes, but you do not hear the rest of the story. Yes, we paid $426 for a claw hammer. But we bought only one at that price, and then demanded and received reimbursement. Yes, we did purchase two diodes for $104 apiece. However, we received a full refund for both and purchased 122,000 of the same diodes at 4 cents apiece.

We are not perfect managers, nor have we made such a claim. Like most, we have chinks in our management armor. This was true particularly during the 1970s when double-digit inflation hid too many management weaknesses and budget austerity led us to believe we could scrimp on people and rely solely on computers. Attempted cures sometimes caused greater ills, such as lapses in quality control, hidden practices of gross overcharges, and abandonment of hands-on control techniques. Obviously, our management problems did not derive from criminal intent. They came from the unwitting waste of business-as-before management when economic convulsions were rampant.

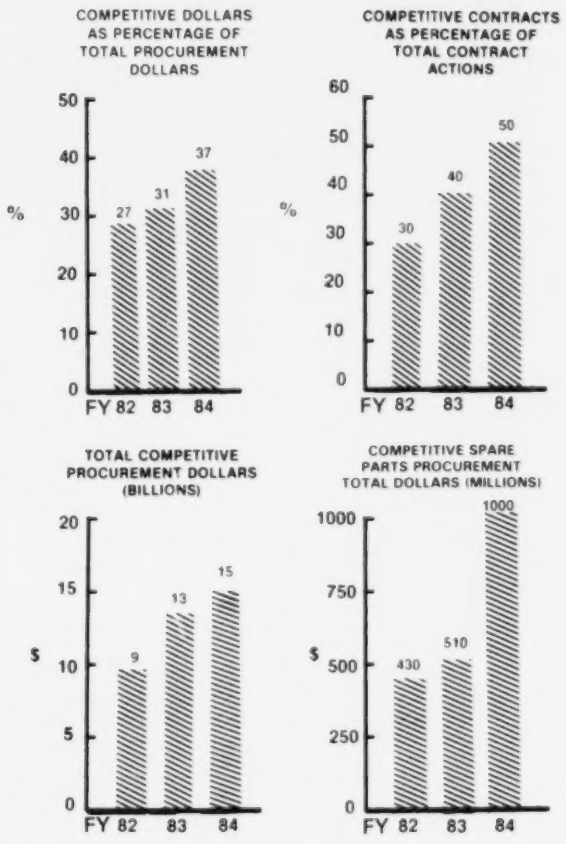
The Navy has responded to the management challenges posed to correct earlier problems. Our own price fighters have exposed the vast majority of these problems. Investigative reporters are not the first to lift the rug and find excesses—it is our own hardworking and concerned people. We recognize our responsibility to correct our own problems and use wisely the defense dollars entrusted to our care.

We can look with pride at a growing list of success stories. The results of our efforts to increase the use of competition have been impressive as shown in Figure One. In FY 84 we awarded $14.5 billion competitively. That figure represents 37 percent of total Navy procurement dollars and is a 54 percent increase over the total dollars awarded competitively in FY 82.

Equally significant is the fact that over 50 percent

FIGURE ONE

NAVY COMPETITION PERFORMANCE



of all individual contract actions processed by the Navy last fiscal year were competitive. That contrasts with just 30 percent in FY 82. Competition in spare parts procurement totaled more than $1 billion dollars awarded competitively in FY 84, a 133 percent increase over the FY 82 amount. Representative of our increasing emphasis on competition, we have set a challenging goal for FY 85 of 45 percent of direct-purchase dollars to be awarded competitively.

Paralleling these initiatives, the Navy has moved to allow more contractor participation in weapons systems designs, and we have benefited through our expanded use of fixed-price incentive contracts. Nearly all FY 84 shipbuilding contract awards were either firm-fixed-price or fixed-price incentive with equal sharing of cost savings or cost growth up to the ceiling. Under these 50-50 share line arrangements, contractors are rewarded for under-budget performance and penalized by sharing cost growth up to the contract ceiling and bearing all cost growth over ceiling. This business strategy is being continued.

Multi-year procurement and leasing programs also have contributed significantly to the procurement economies and efficiencies achieved over the past several years. However, Congressional restrictions on these programs have limited attainment of full potential benefits. I strongly recommend that the restrictions on these programs be reassessed and eliminated.

Let me also mention our Central Navy Integrity and Efficiency Hotline. Its first year of operation led to savings of more than $1 million. The Hotline, which celebrated its first anniversary on Oct.3, 1984, received more than 1,000 reports with 400 cases tasked for investigation to either the on-scene chain of command or the Naval Investigative Service. The $1 million savings resulted from such actions as identifying defective supply parts, erroneous shelf lives, excessive pricing and the waste of government resources. The Hotline is but one element of our ongoing Navy drive to eliminate fraud, waste, and abuse within the Department.

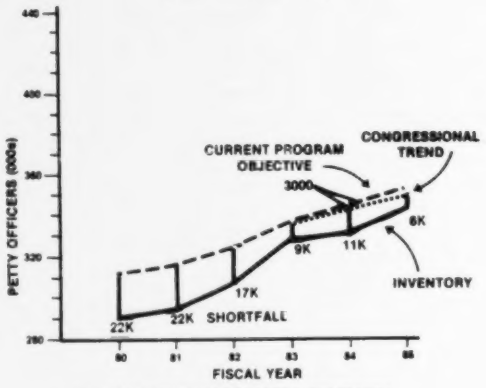
We also have taken steps to correct deficiencies in the management and reporting of consulting services, generally known as Contractor Support Services (CSS). A Navy working group was established in the spring of 1983 to identify problem areas and recommend corrective measures. The Office of the Secretary of Defense (OSD) created a similar group in June 1984, and the Navy has actively contributed to the group's work. As a result of our efforts, we are developing clearer and more precise definitions of CSS and its components. Also, we are taking action to improve control, accounting, and management reporting procedures for CSS. A new omnibus directive soon will be promulgated to provide comprehensive and consistent CSS policy guidance.

I want to emphasize again we recognize our obligation, and we will continue to make every effort to improve stewardship of the nation's defense dollars.

Personnel

A large national corporation used to have as its slogan, "Progress is our most important product." Progress is important in the Navy too, and the key ingredient in our progress is people. I do not have to remind you of the situation which existed just five years ago when some of our ships were unable to get underway. The problem was not lack of fuel, lack of ammunition, or lack of equipment. The problem was a lack of people. We simply did not have enough of the right kind of people to man our ships and aircraft squadrons properly. Five years ago, we had a shortfall of some 22,000 petty officers in the Navy. Congressional action to increase pay and benefits for the military enabled us to make tremendous progress in reducing the petty officer shortfall as you can see in Figure Two. Before pay and benefits increases, we were unable to meet recruiting or retention goals. At the end of FY 84, we recorded the 58th consecutive month of satisfying our recruiting goals, and were

FIGURE TWO
PETTY OFFICERS FOR 600-SHIP NAVY (E-4 THRU E-9)



REFLECTS NEW SHORE STAFFING STANDARDS

able to re-enlist 58 percent of the young petty officers completing their first enlistment. As shown in Table One, second- and third-term enlisted personnel re-enlisted in equally impressive numbers.

TABLE ONE
ENLISTED RETENTION

	ELIG TO RE-ENLIST	RETENTION GOAL	ACTUAL RE-ENLIST
FY 82			
First Term	43,659	47%	21,949 (50.3%)
Second Term	19,867	67%	12,517 (63.0%)
Third Term	18,666	98%	17,788 (95.3%)
FY 83			
First Term	39,185	49%	21,824 (55.7%)
Second Term	17,287	63%	11,312 (65.4%)
Third Term	18,701	96%	18,065 (96.6%)
FY 84			
First Term	45,924	50%	26,631 (58.0%)
Second Term	19,852	65%	12,784 (64.4%)
Third Term	21,052	95%	19,979 (94.9%)
FY 85 (GOAL)			(projected retention)
First Term	48,288	58%	28,007 (58%)
Second Term	22,026	66%	14,537 (66%)
Third Term	20,405	95%	19,385 (95%)

Our Family Support Program has contributed substantially to improved retention and is designed to assist our people and their families with problems

inherent in military service. Family Service Centers assisted over 600,000 active duty members and their dependents in relocation, deployment assistance, financial education, job referral and counseling. A Family Advocacy Program targets the prevention of and intervention in family violence. This effective, well rounded Quality of Life program lets our people know that we care about their well being; as a result, more decide to remain in the Navy.

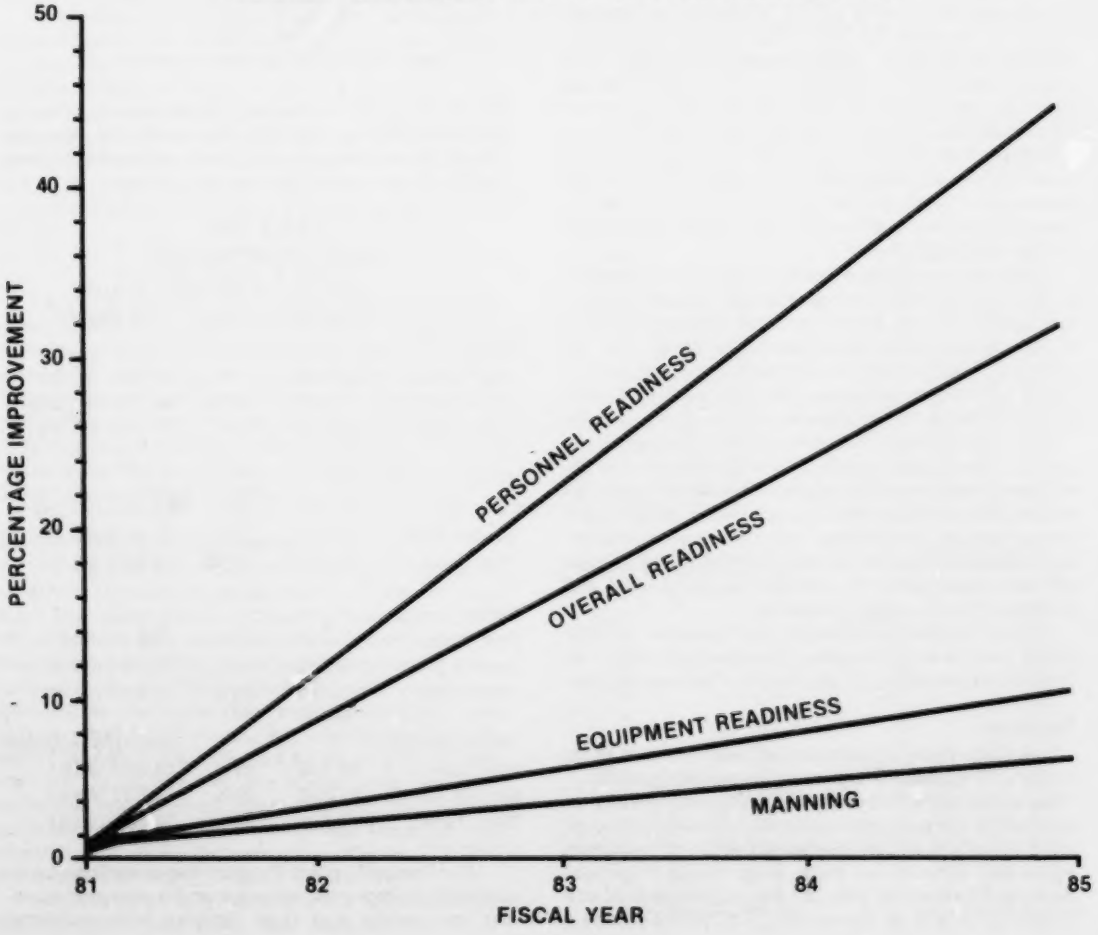
However, mere numbers of recruits and reenlistments are not the only objective; quality is of equal importance. Last year 93 percent of non-prior service enlistees were high school graduates and 65 percent were classified in the upper mental group profile on the Armed Services Vocational Aptitude Battery. Moreover, the retention picture has improved to the point that we can be more selective in deciding to allow sailors to re-enlist. I cannot overemphasize importance of the quality dimension. Those of you who have visited our ships and aircraft squadrons recognize their technological complexity. We need highly capable technicians to maintain and operate state-of-the-art platforms and systems. To match the Soviet Navy's sizable numerical advantage, we must have a qualitative edge. Such qualitative superiority demands highly capable personnel.

We cannot operate such sophisticated equipment with personnel debilitated by the use of illegal drugs. Yet, in 1980 tests showed that nearly one out of every two sailors used marijuana or hashish. Experts told us we could not make improvements because the Navy was a microcosm of a society which accepted drug abuse. After careful research, we established a scientifically reliable program and enforced it rigorously. Today, tests show that less than 10 percent of our sailors use marijuana or hashish and the trend continues to improve. Indeed, our efforts have been so successful that we are consolidating Alcohol/Drug Rehabilitation Centers, and placing greater emphasis on substance abuse prevention.

Yes, our progress over the past several years is largely due to improved manning. The relationship is clear and has been demonstrated by many analyses including one recently completed by the Naval Postgraduate School. Modest increases in manning have permitted us to put the right people in the right places to enhance personnel and fleet readiness. As shown in Figure Three, our ability to recruit and retain per-

FIGURE THREE

FLEET MANNING AND READINESS



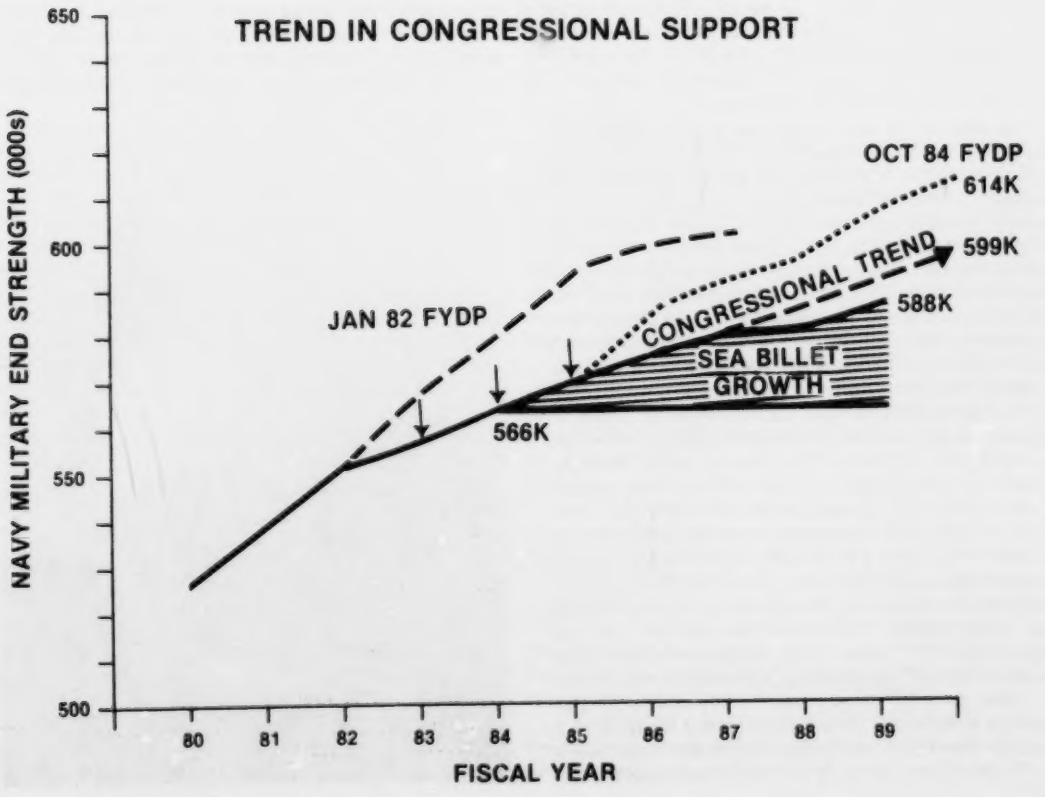
sonnel in critical skills has resulted in a 32 percent increase in overall readiness since 1981. The SPS-48 radar provides an excellent example. The missile systems on our cruisers and destroyers are dependent on the powerful SPS-48 3-D radar to detect threat aircraft and missiles at long ranges. In 1981, we had only about half the required SPS-48 radar petty officer technicians and this key radar had an unacceptable level of downtime throughout the fleet. Today the SPS-48 technician rating is manned at the 100 percent level and downtime per quarter has been reduced by 67 percent. Moreover, the shortage in SPS-48 petty officer technicians forced us to hire civilian contractors to help maintain the radars at a cost of nearly $1 million per year. Today the requirement for civilian contract support has been cut nearly in half.

Adequate numbers of properly trained, disciplined, and motivated people go far to explain why you no longer hear about ships unable to get underway. We have made other improvements as well, reducing the manpower requirements or manpower intensity of our ships and systems. The *Arleigh Burke* class destroyer which Congress funded last year is equivalent in size and far exceeds the firepower of a World War II cruiser. Yet the DDG 51 manning requirement is less than one-third of a comparably sized World War II cruiser. These manpower savings are evident in *Spruance* class destroyers and *Oliver Hazard Perry* class frigates as well as other surface ships. In the submarine area, we continue to make major improvements in capability without increases in crew size. Such initiatives have permitted substantial reductions in manpower costs as a portion of the Navy budget. Manpower costs represent 30 percent of the Navy budget today as opposed to 41.6 percent in 1974.

Despite these successes, it is impossible to increase the size of the Navy from 479 ships to 600 ships without an increase in manpower. As we began building toward the 600-ship Navy, we projected a requirement for an additional 102,000 personnel. A 600-ship Navy represents a 25 percent increase in the size of the fleet from its low point in 1980. Yet, improvements in manpower intensity will enable us to man the fleet with less than a 20 percent increase in manpower. Accordingly, Navy end strength needs to grow at a modest annual rate of less than 2 percent. However, previous Congresses have capped end strength growth at about half of this requirement as you can see in Figure Four. This is producing a negative impact on readiness. For the first time in recent history, CinCPacFlt has included end strength as one of his top five concerns, indicating that any further degradation of his shore establishment cannot be accepted without a reduction in functions. This level of fleet concern indicates we have reached the limit of

FIGURE FOUR

NAVY END STRENGTH



shore billet degradation. Also, end strength constraints limit timely relief of ship-based personnel eligible for shore duty and cause longer sea duty tours for sea-intensive ratings, which inevitably result in lower retention. If we cannot retain adequate numbers of petty officers, recent achievements in improved readiness and maintenance will quickly erode. Moreover, constraining overall end strength below programmed levels will require the Navy to reduce accessions. This causes a long-term degradation of petty officer inventories, eventually creating an insufficient base from which to promote the required number of petty officers. The petty officer shortfall projected to be overcome by FY 88 will increase instead, with detrimental effects on fleet readiness. I am not speculating, for we endured a situation much like it in the 1970s. Inadequate numbers of skilled petty officers caused longer sea tours, compounding retention shortfalls, and readiness plummeted. I cannot overemphasize the importance of your approval of our FY 86 manpower request, which I will address in more detail in discussing the budget submission.

600-Ship Navy

With the bipartisan support of the past two Congresses, we are well on our way toward attainment of a balanced 600-ship Navy by 1989 including 15 carriers, increased amphibious lift, recommissioned and modernized *Iowa* class battleships, *Ticonderoga* class cruisers, *Arleigh Burke* class destroyers, 100 nuclear-powered attack submarines, and a strengthened leg of the strategic triad in the *Ohio* class submarine and *Trident II* missiles. This past year witnessed the addition of 19 ships to the fleet. The battleship *Iowa* (BB 61) was recommissioned, the second of *Ticonderoga* class cruisers *Yorktown* (CG 48), was commissioned as was one *Trident* submarine five attack submarines, eight *Oliver Hazard Perry* class frigates; and two TAGOS surveillance towed-array ships. Since 1980, the fleet has grown from the 479 ship level to the present level of 523.

Qualitative as well as the quantitative aspects of this growth are very important. We are building the right ships to counter the Soviet Navy's numerical advantage. Such qualitative superiority is obvious in our nuclear powered aircraft carriers and embarked air wings. The improved 688 class submarines being authorized and built today are twice as effective as the original SSN 688 class submarine. We have revolutionized surface combatant anti-aircraft warfare capabilities with the *Aegis* system in *Ticonderoga* class cruisers. This system's ability to engage large numbers of air threats simultaneously is a major step in countering cruise missile saturation raids. Many of our battleships, cruisers, destroyers, and submarines are being armed with *Tomahawk* cruise missiles, capable of flying long distances and attacking targets at sea or on land. Its broad compatibility with our combatants distributes offensive power as never before, greatly compounding the enemy's targeting problem. *Tomahawk* complements the power of the carrier air wing and multiplies the effectiveness of the force at sea. Additionally, *Tomahawk* opens the way for deploying battle forces without carriers when carriers are not available or not appropriate to the threat.

Ohio class SSBNs represent a key element in our strategic triad and substantially increase our deterrent posture. Any attempted Soviet first strike would leave the *Trident* force on station, ready to respond, and capable of inflicting unacceptable retaliatory damage. The continued invulnerability of our strategic submarines is crucial to our national security. To this end the Extremely Low Frequency (ELF) system adds a significant new dimension to SSBN communications, enabling commanders to communicate reliably with strategic submarines operating at deep depth and standard speeds. Further, our SSBN security program continually reviews technologies which conceivably could be relevant to future survivability of the SSBN force, including actual or potential breakthroughs. Although most scientific phenomena are well understood, healthy skepticism and vigilant search for new ideas must be maintained as technologies continue to improve. Because of this program, which stays on the leading edge of science and has the best technical support in the country, our best estimates indicate that there is no credible threat today, or in the foreseeable future, to our SSBN force. The situation is dynamic, and we must continue our vigorous efforts to ensure we remain ahead of the threat.

Recent fleet experiences, especially the Royal Navy's Falkland Islands combat experience, highlight the importance of ship survivability. We must build ships that can go in harm's way, take battle damage, survive, and remain operationally capable. We have made significant progress, and I am dedicated to continue improving our survivability posture. We intend to expedite survivability improvements into the fleet to ensure maximum readiness and warfighting sustainability during peacetime and combat operations.

Results of shock tests conducted this past summer on *Yorktown,* second of the *Ticonderoga* class cruisers, point to the success of our passive survivability program. *Yorktown* experienced four significant percussion shocks from nearby explosions simulating the effect of battle conditions. Even during the most severe shock, the ship did not go dead in the water. Her main engines were not damaged. Her combat sys-

tems were partially impaired, but were restored in short order.

Improving ship survivability is an important element in our program to build a 600-ship Navy. I am encouraged by our progress to date and, with your continued support, we will make further headway on this important problem.

Of course, 15 deployable aircraft carriers remain key to an effective, balanced 600-ship Navy. We will achieve that goal by building the three new carriers authorized and funded, and by modernizing eight of our older carriers in the Service Life Extension Program (SLEP). *Saratoga* (CV 60), the first carrier to be SLEPed, just completed her first post-SLEP deployment in outstanding fashion. Prior to deploying, *Saratoga* passed a comprehensive and rigorous Operational Propulsion Plant Examination (OPPE) conducted by a special inspection team from the staff of CinCLantFlt and then achieved high grades on Operational Readiness Evaluation (ORE) and Preventive Maintenance System (PMS) inspections. After passing these important inspections, *Saratoga* deployed to the Mediterranean for six months and performed brilliantly. After successful full power trials, *Saratoga* had no boiler problems during 2,400 steaming hours per boiler. Finally, the carrier's air wing averaged 78.3 percent mission capable during the last four months of deployment.

Lessons learned during *Saratoga*'s trailblazing SLEP are being applied to the *Forrestal* (CV 59)and *Independence*'s SLEPs. *Saratoga*'s record this past year clearly reaffirms the wisdom of SLEP. SLEP extends the service life of our aircraft carriers from 30 to 45 years, provides a cost-effective alternative to new construction, and ensures that the National Command Authority will have the flexibility of a deployable 15 aircraft carrier battle group force.

Our program to maintain aircraft inventories with the proper mix and in the right numbers to support the growing Navy was sustained in 1984. A total of 281 new aircraft entered the fleet including the F-14A, F/A-18A, A-6E, EA-6B, E-2C, and P-3C. I am particularly pleased to report our experience with the F/A-18 *Hornet* now appearing in the fleet.

The F/A-18 is the first entirely new tactical aircraft to become operational with the U.S. Navy in the past 12 years. *Constellation* (CV 64) the first carrier to receive F/A-18 aircraft, is operating today in the Pacific Ocean with twice the fleet air warfare capability she had before bringing aboard two *Hornet* Strike Fighter (VFA) squadrons. Recent reports from *Constellation* have been extremely positive, with the *Hornet* displaying launching and boarding rates far exceeding all expectations. The F/A-18 is proving to be three times as reliable as any aircraft in the fleet, requiring only half the maintenance man-hours of other Navy aircraft. As it approaches 100,000 cumulative flight hours, the F/A-18's safety record exceeds those of comparable Navy aircraft by 50 to 80 percent. The carriers *Coral Sea* (CV 43) and *Midway* (CV 41) will deploy with the F/A-18 in 1985 and 1986, respectively, further expanding the capability and flexibility of the fleet.

While the F/A-18's safety record has been impressive, this past year was a remarkably good one in aviation safety across the board. Indeed, 1984 was the safest year in naval aviation history. The number of aircraft mishaps in 1984 was 21 percent lower than in 1983. Fatalities resulting from aircraft mishaps were 23 percent lower in 1984 than in 1983. And, the cost of aircraft mishaps in 1984 was 39 percent below the 1983 level. We saved 21 lives, 19 aircraft, and over $200 million compared with 1983.

I also am pleased with our progress in exploiting space to support the operations of the 600-ship Navy. Space assets, for example those providing reliable and clear real-time communications among naval forces, are vitally important for everyday fleet operations. The first space shuttle deployment of communications satellites for the Navy—LEASAT I and II—occurred last year. Two Navy satellite development programs, Navy Remote Ocean Sensing System (NROSS) and Geodesy Satellite (GEOSAT), will provide highly accurate oceanographical and meteorological data for naval forces. Global Positioning System (GPS) terminals in ships, submarines, and aircraft will provide significantly improved navigational data. The Naval Space Command has helped focus our space exploitation efforts and will support the Unified Space Command when established.

In October 1984, the Navy placed the first civilian oceanographer aboard the space shuttle. This flight demonstrated the role of manned space flight in advancing knowledge of the ocean and emphasized the need for an ocean satellite system. Manned space activity in oceanography and existing environmental satellites complement each other in important ways. Space oceanography efforts continually reveal new insights into the complexity of the ocean and phenomena we do not fully understand. In this sense, the ocean is becoming more opaque rather than more transparent. As we improve our understanding of the ocean, we enhance our Anti-Submarine Warfare (ASW) posture and reduce our own vulnerability. Space-based oceanography is revolutionizing ocean science research, providing unique insights into strategic and tactical exploitation of the complex ocean environment, and affirming the importance of the Navy's role in space.

Naval Reserve

I am pleased with the progress we have made in integrating the Naval Reserve into our Total Force. We have made significant headway on implementing the Total Force initiatives reported to Congress last year, and this year's report builds upon that solid base. Today, the Naval Reserve is an indispensable component of the Navy, and without its important contributions, we would not be able to fulfill our forward-deployed, high operational tempo (OPTEMPO) commitments.

Fully one-third of our ASW Patrol Aircraft (VP) squadrons are in the Reserve force. Almost half of our reserve VP squadrons fly highly capable P-3 TACNAVMOD aircraft which allows Reserve flight crews to operate side by side with active squadrons. Similarly, our surface ASW efforts increasingly rely on contributions of Reserve force ships. Today with *Knox* and *Oliver Hazard Perry* class frigates, surface Reserve force capability steadily grows. Both classes of ships, equipped with the latest in ASW equipment, prove their worth in both the Atlantic and Pacific theaters on a regular basis. In a like manner, our submarine forces also benefit from the contributions of Reserves in Intermediate Maintenance Activities, operational staffs, and command centers.

Because of the integral role of the Reserve in today's Navy, I want to highlight some initiatives, mention our progress, and point out plans for the future.

This past year witnessed a remarkable expansion in the size and capability of the Naval Reserve. Drilling Selected Reservists increased to more than 102,400 by the end of FY 84, with the number of reservists on full-time active duty for Training and Administration of the Reserve (TAR) at more than 13,300.

Reserve personnel goals are indeed challenging and we have responded with programs designed to offer new and enhanced incentives and improve retention. The new Sea/Air Mariner (SAM) program has been remarkably successful in providing junior enlisted personnel for the Selected Reserve. We recruited the full quota of 10,000 non-prior service personnel last fiscal year, and are well on our way to accessing the same number this year.

In the Naval Surface Reserve Force, two more FFG 7 class frigates will join the Naval Reserve in FY 85. When added to three FFG 7s and the six FF 1052s now in place, the Naval Reserve frigate force will increase to 11. Six Craft of Opportunity Program (COOP) units also will join the Naval Reserve Force in FY 85. In FY 86 we will add four more FFG 7s, thereby passing the halfway mark in this ambitious program of transitioning 26 ASW ships to the Naval Reserve Force, 18 FFG 7s and eight FF 1052s. Six COOP units and three ARS class ships will join the Naval Reserve Force in FY 86. Moreover, two new Seabee battalions as well as a Mobile Inshore Undersea Warfare (MIUW) unit will stand up in FY 86. This trend of NRF growth will continue beyond FY 89 as AO 177 class oilers, eight Mine Countermeasures Ships (MCM 1) and 17 Minesweeper Hunter (MSH 1) class ships transition to the Naval Reserve Force.

The Naval Air Reserve Force has embarked on an ambitious modernization program with both carrier air wings slated for transition to state-of-the-art aircraft: F-14, F/A-18, A-7E, and E-2C. The first Reserve E-2C squadron is now in place. VF-301 accepted its first F-14 aircraft in October 1984, and F/A-18 transition training for VFA-303 aircrew and maintenance personnel has been under way for over a year. In FY 86, VFA-303 will receive its own aircraft and be ready to mobilize. A-7E transition for one squadron in FY 85 and two squadrons in FY 86 will complete the programmed upgrade from the A-7B. Helicopter ASW support for Naval Reserve Force frigates will be provided by three HSL squadrons, one in San Diego, one standing up in FY 85 on the East Coast, and a third to be commissioned in FY 86. The Navy's only combat search and rescue squadron, Reserve Helicopter Composite Squadron 9, based in San Diego, will evaluate the two UH-60 aircraft authorized by Congress last year. Seven more Reserve P-3 squadrons will receive TACNAVMOD upgrades, three in FY 85 and four in FY 86, to complete the program for all Reserve maritime patrol aircraft. Additionally, this year we retire our remaining C-118 aircraft and complete our airlift modernization by purchasing the final increment of used DC-9s for our Reserve Air Transport Squadron. I want to point out that in 1984 we initiated a new Reserve Squadrons Augment Unit (SAU) training program in which SAU air crews fly the same A-6, F-14, and E-2C aircraft as their gaining squadrons. We plan to expand the SAU program to increase our Total Force readiness.

We intend to build the Naval Reserve Force into an even more capable part of the Navy team. We have taken measured steps to ensure that the Naval Reserve Force will have the trained people, modern ships and aircraft, and integrated logistics support to do the job upon mobilization. We are working toward optimum utilization of all our assets.

We have made important headway on Congressional directives to increase our reliance on Selected Reserve units to assume responsibilities traditionally assigned to active duty units. I am, however, concerned that we may not be able to gain maximum potential from the Reserve in the period prior to full-scale hostilities. For example, development of the concept of Maritime Prepositioning Ships has generated a potential need for early availability of cargo-handling forces. These forces will support the U.S. Marine Corps in establishing Marine Amphibious Brigades

ashore in overseas locations within 10 days of an alert. This scenario could unfold in a pre-hostilities environment prior to the execution of any form of mobilization or call-up. Since active duty cargo-handling forces are not sufficient to carry out this mission, early recall of Reserve cargo handlers may be necessary. Similar conditions exist in other military support functions which we have transferred from active to our Selected Reserve forces. Ways to overcome this impediment to our ability to respond must be assessed, and I solicit your help in shoring up this important area.

Strategic Sealift

The successful deployment and support of forces in executing military strategy in both war and peace depends heavily on Strategic Sealift. Increasing emphasis on mobility force readiness coupled with a precipitous decline in the U.S. Merchant Marine has brought the Strategic Sealift role into sharp focus. Recognizing the criticality of this role, in March 1984 the Navy formalized Strategic Sealift as a distinct Navy function. Congressional support of related programs has enabled us to move rapidly toward our sea lift and cargo movement objectives. The Ready Reserve Force (RRF), which would be activated in time of crisis, is expanding toward the current goal of 61 dry cargo ships and 16 tankers. Next year, we will commence our Sealift Enhancement Features (SEF) program to increase the military utility of commercial merchant ships.

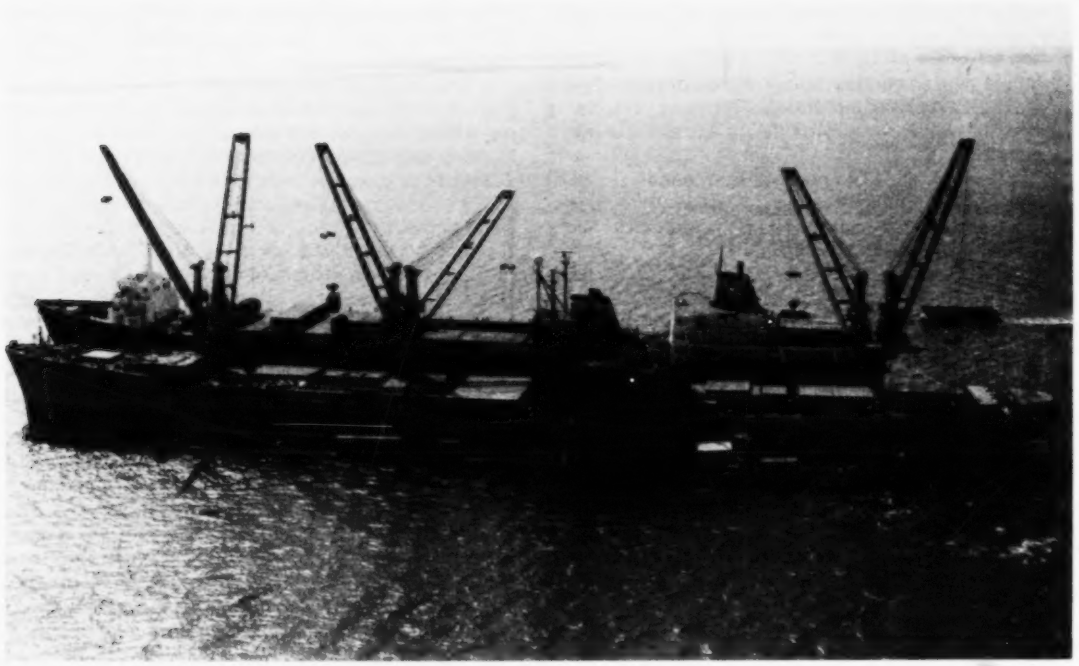
The completion of several ship conversion programs in FY 86 will cramatically increase our mobility capability. The last of eight Fast Sealift Ships (SL 7) will be delivered in FY 86, providing a sea lift capability able to deliver combat equipment at speeds in excess of 30 knots. They will be strategically berthed near designated Army embarkation ports, ready for full operational service within four days of notification.

The last of 13 MPS' will deliver and form the third MPS squadron. This squadron will provide forward deployment of equipment for three Marine Amphibious Brigades and combat support for 30 days, thereby expanding the rapid global response capability of the Marine Corps. These MPS squadrons will be prepositioned in the Eastern Atlantic, Western Pacific, and Indian Ocean. This concept combines the responsiveness of airlifted troops with an equally responsive sea lift delivery of prepositioned combat equipment as a major improvement in our ability to form a rapid credible forward defense. Funding of the second aviation maintenance support ship (TAVB) this year will augment the MPS squadron deployments. We also will see the delivery of the first hospital ship (TAH) in 1986, providing much needed medical care.

As demonstrated in Exercise JLOTS II during the fall of 1984, the auxiliary crane ship has proven to be an indispensable asset to meet cargo offload and discharge requirements, either through damaged port facilities or directly over the shore. This fiscal year we continue our efforts to complete an 11 ship program by the end of FY 88.

We will continue the Depot Ship Prepositioning Program (formerly NTPF) which provides a credible deployment potential for Southwest Asia through afloat prepositioning of Army and Air Force equipment and ammunition along with common user POL stocks.

Delivery capability alone will not do the job. Amphibious offload systems and equipment remain essential to discharge ships and transport combat equipment and sustaining support ashore. The sea lift program is structured to provide that requisite balance. In the summer of 1984, the Navy signed an agreement with the Army to enhance joint inter-service responsibility in the development, acquisition, and use of Army/Navy cargo offload and discharge systems. The Army Chief of Staff and I endorse this cooperative logistic effort and are enthusiastic about the benefits to be gained. Our objective is to achieve a balanced program and ensure that strategic sea lift ships, their cargo offload systems and supporting



logistic systems provide a smooth flow of materials to support combat forces worldwide.

Research, Development, Test, and Evaluation (RDT&E)

Challenges of the current and future world environment confirm that we will need highly capable ships, aircraft, and systems to deal with the highly capable threats we face. It has long been basic U.S. policy that we cannot and will not match the Soviet numerical advantage, but will instead offset any numerical disadvantage with superior qualitative performance and a technical edge. Our research and development programs are the foundation of our ability to maintain this qualitative edge.

Last year, I raised with you several concerns about our research and development posture, particularly the adverse effects of decreased funding coupled with the redirection of a large number of line items. Better dialogue which ensued has helped to improve this situation. I look forward to your continued support for a vigorous research and development program with modest but essential growth.

Research and development in the Navy is not isolated from warfighting needs; either today's or tomorrow's. Navy research and development is tightly coupled with today's maritime strategy and guided by our ongoing long-range planning efforts.

In evaluating the relevancy and effectiveness of our research and development program, we utilize not only in-house expertise but also solicit ideas from knowledgeable people outside the Navy. My CNO Executive Panel Advisory Committee (CEP) reviews key strategy and development programs. We also work with the Naval Research Advisory Committee (NRAC) and the Naval Studies Board (NSB) of the National Academy of Sciences, both consisting of highly qualified and respected members from the science and technology communities. Their recommendations provide unique insights into naval problems and lead to changes in our development plans. We also rely on the advice of the Navy laboratories and U.S. industry for development of systems which will provide the future fleet with the means to execute its mission. Only proposed systems that offer the greatest effectiveness while remaining affordable are accepted and incorporated.

I am particularly pleased with the test and evaluation part of our RDT&E efforts, and I want to highlight the achievements of the Navy's Operational, Test and Evaluation Force (OPTEVFOR).

During the past two years, OPTEVFOR has published 142 Operational, Test, and Evaluation (OT&E) format project reports, 45 OT&E quick-look reports, and 28 operational tactics guides. Over this period, OPTEVFOR recommended fleet introduction of 67 percent of the systems completing OT&E. OPTEVFOR recommended *against* 19 percent of the systems and was unable to make any recommendations without additional OT&E in 14 percent of the cases. A testing organization that refuses to approve a full third of the systems it reviews builds a reputation. The Navy's OPTEVFOR is known for its objectivity, independence, and rigor. I assure OPTEVFOR's independence, as it operates under my direct command with no intervening layers, reporting all OT&E results directly to me and the Secretary of the Navy. OPTEVFOR tries to defeat each new system on its own terms and our program managers view OPTEVFOR as an adversary. Just as in other areas in our society, this adversarial relationship is healthy and constructive. It ensures that systems operate properly before they enter the fleet.

I do not want to imply that we have solved all the problems in the OT&E process. Clearly, we have not. For example, we must improve the development of operational requirements and performance thresholds. Too frequently these are poorly defined or written as technical vice operational measures. It is indeed difficult to develop substantive and defensible operational requirements and performance thresholds. Nevertheless, they are critical to the T&E process and we are making real progress in our efforts to rectify this problem.

Overall, I think the OT&E process is working well in the Navy. We work closely with the newly established Operational, Test and Evaluation Office in OSD to provide appropriate operational test and evaluation data required by Congress. I look forward to further improvement with your continuing support.

The FY 86 Budget

Budget preparation is far from an abstract accounting exercise. Indeed, the most telling policy statement of any organization may be its annual budget. A budget clearly highlights priorities and needs, and this year's Navy budget request is no exception.

The foundation of the Navy's budget is the maritime strategy; that is, the role of maritime forces in the national military strategy. The maritime strategy follows from and supports the goals and guidance set forth in SecDef and JCS documents, and describes the employment of naval forces in a global war against the Soviet Union. While this global war case is not the most likely contingency we face, it is the most demanding, and forms the basis for our budget preparation. To these requirements, however, we must add the considerable resources needed for the operations of a forward-deployed Navy maintaining deterrence in this era of violent peace. You will note that more than half of the FY 86 budget request is slated for readiness.

The Navy is requesting a Total Obligational Authority (TOA) of $95.5 billion for FY 86. This represents 4.5 percent real growth over our FY 85 funding and is, we think, the minimal level of growth adequate to ensure a sound balance among the four pillars of readiness, sustainability, modernization, and force structure.

The first and largest of the pillars is readiness, comprising over 50 percent of the budget request. It contains the funding required to operate and maintain the fleet on a day-to-day basis, e.g., money for ship and aircraft fuel, salaries for our people, maintenance and repair of ships and aircraft, training, and support. In short, the readiness pillar is the day-to-day cost of operating the Navy and keeping it ready to fight. The second pillar is sustainability, and it represents about 10 percent of the requested funds. These funds cover the cost of the Naval Reserve, stocks of weapons, and war reserve material. The modernization pillar accounts for approximately 20 percent of the request and includes all Navy RDT&E, fleet modernization or ship alterations (SHIPALTS), and aircraft and weapons modifications. The fourth pillar is force structure, and it also represents about 20 percent of the program. Included here are the costs of new ships and aircraft

and the costs of bases and support facilities required to maintain and expand the size of the force. The growth in each of the four pillars represents a relatively uniform extension of the FY 85 budget and is consistent with our estimate of requirements based on our understanding of national security policy and objectives.

I now would like to review the four pillars in more detail, highlighting our progress over the past few years, and noting some present and future objectives.

Readiness

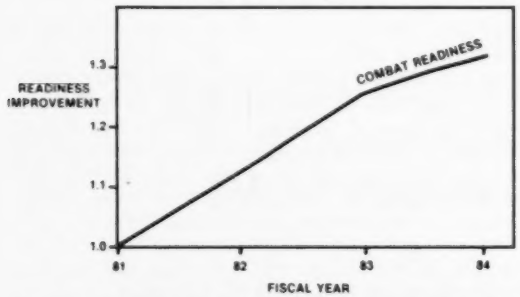
We have attained impressive improvements in warfighting readiness. This assessment is not based on a seat-of-the-pants judgment; although were you to ask virtually any sailor or naval officer in the fleet, he or she would certainly affirm this judgment. Readiness of naval forces is demonstrable through objective measurements.

Every ship and aircraft squadron in the Navy is assigned mission areas which require specific capabilities. As an example, Navy destroyers must be prepared for ASW, AAW, and anti-surface warfare (ASUW), etc. We assess each destroyer's readiness to perform these missions and its overall capability to perform all assigned mission areas. Readiness within each mission area is further divided by categories, including personnel, equipment, training, and supply support. For example, the ship's readiness to perform ASW will be affected by the number and proficiency of its people. Further, the ship's readiness to perform AAW will be affected by the material condition of its radars and communications equipment. Training is a key component of readiness with rigorous requirements for individual sailors as well as teams which operate together. We gauge training readiness based on amount of training accomplished and when completed. Lastly, without adequate supplies of ammunition and spare parts to repair equipment, readiness would be degraded.

FIGURE FIVE

OVERALL READINESS TREND

IMPROVED READINESS SHIPS & AIRCRAFT SQUADRONS



At least once per month, or as changes in status occur, each ship and aircraft squadron submits a report of its personnel, material, training, and supply support readiness in assigned mission areas. This reporting procedure has been in place and adhered to for more than a decade.

Accordingly, I report with full confidence, based on tried and tested empirical data, that we have witnessed an impressive improvement in Navy readiness since 1981, as shown in Figure Five. The data not only provide commanders in the field with tools to gauge the readiness of their forces, but also provide the OpNav staff with information to plan and budget for the proper allocation of funds; it helps us establish priorities and match funding to priorities.

Personnel

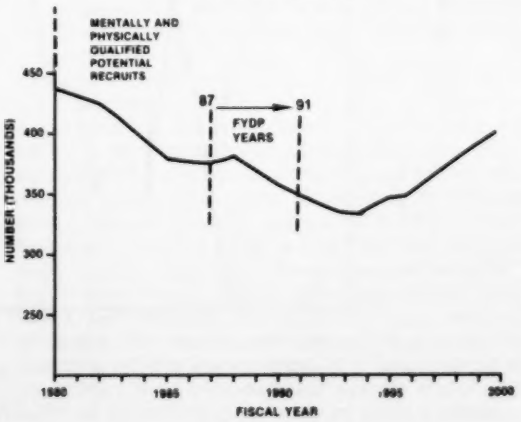
As I have indicated, nothing is more central to readiness and overall Navy posture than our people. Well established measurements show that personnel readiness in the Navy increased substantially between 1981 and 1984, and is without question the foundation of our overall readiness improvement. To sustain this progress, the FY 86 personnel request supports a measured increase in manpower to allow us to man today's force, to support it adequately with shore-based maintenance and support facilities, and to build the skill and experience levels needed for the near future. We need balanced increases in the Total Force including an increase of 15,000 in the active force for a total of 586,300. Reserve force structure improvements necessitate increases for average strength of all Reserve personnel in a paid status of 10,500 to reach a total of 134,400. Civilian personnel spaces will total 318,700, an increase of 1,400.

These marginal increases are key elements in supporting future force levels. The active strength increase of 2.8 percent over FY 85 is small in relative manpower terms, and small in dollar costs when compared to initial force level investment costs. As I pointed out earlier, previous Congressionally imposed end strength constraints, (Figure Four) have created significant difficulties in properly manning shore activities to support the operating force, and sea-intensive ratings are forced to stay at sea longer. We requested an end strength growth of 28,000 regular and active duty Reserve personnel in FY 83; Congress approved only 19,100 growth. For FY 84 we requested an end strength growth of 11,900; Congress approved 4,500. And, for FY 85 we requested a growth of 10,700; Congress approved 6,500. The end strength growth permitted by Congress over the past three years has been adequate to support only manpower required to provide initial crews for new ships as they join the fleet and to correct manning deficiencies in existing ships and aircraft squadrons. If this trend continues in FY 86 and beyond, the Navy will

FIGURE SIX

QUALIFIED NPS MALE POTENTIAL RECRUITS

Source: U.S. Census Bureau



be 34,000 people below total programmed objective in FY 89, creating a critical inventory shortfall and robbing us of the base from which to promote required numbers of petty officers. This inevitably will cause serious readiness degradations much as we faced in the 1970s. There is no alternative unless adequate end strength growth is authorized.

As I noted earlier, 1984 was another good year in recruiting. We achieved recruiting goals and 93 percent of the non-prior service recruits had high school diplomas. However, one must balance this success with awareness of the declining pool of males in the 17-1/2 to 21 age group, as you can see in Figure Six. Indeed, as in the other services, the Navy began to see signs of a more difficult recruiting environment in 1984. Two early indicators of our recruiting program's capability to meet programmed accessions are the ability of our recruiting districts to obtain new contract objectives and the status of the Delayed Entry Program (DEP), our bank of prospective sailors. Figure Seven shows a serious depletion of this bank because of the increasing number of recruiting districts unable to meet new contract objectives. At the end of FY 84, the formerly healthy DEP declined to the 40 percent level, and the downward trend continues. Experience during the 1970s shows that when the DEP reaches the 33 percent point, recruiters are pressured to meet current accession demands and recruit quality plummets. While there are other signs pointing to recruiting difficulties, suffice to say that with the manpower pool declining and the economy growing, we face an increasing challenge to recruit sufficient numbers of needed quality personnel. These unmistakable signs make the requested recruiting and advertising budget especially critical if we are to keep pace with changing manpower market conditions.

Of course, retention is just as important as recruiting in ensuring a force of adequately trained personnel. It is impossible for me to overemphasize the importance of the Selective Re-enlistment Bonus (SRB) and other special pays in our retention program. The cost of these programs is insignificant in comparison to the payoff they provide in creating the proper climate for retention of petty officers with vital skills and experience. Figure Eight provides a particularly telling picture of the need to protect our mission critical ratings. You will note that in comparison with their non-critical skill shipmates, these people fail to meet career force objectives at twice the rate; they stay at sea 80 percent more of the time; they are twice as

FIGURE SEVEN

RECRUITING DISTRICTS MISSING NEW CONTRACT GOALS AND DEP POOL REDUCTIONS

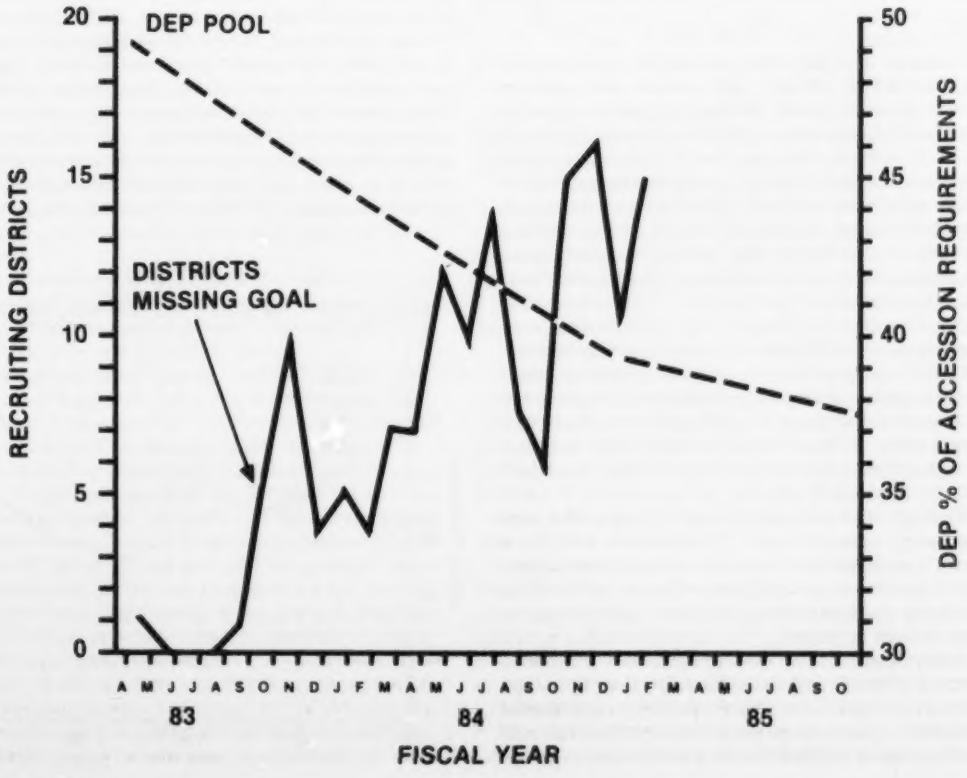
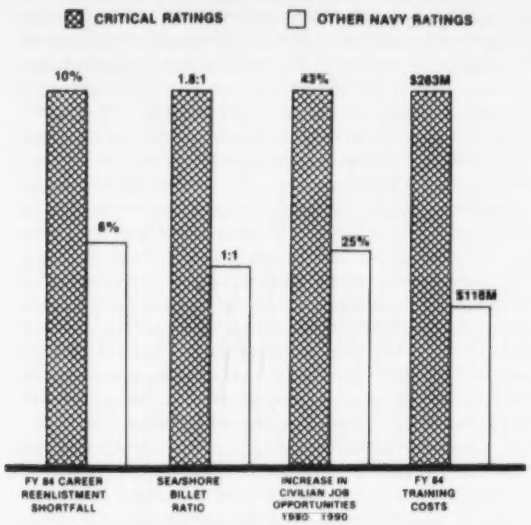


FIGURE EIGHT

COMPARISON OF RATINGS CRITICAL TO READINESS WITH ALL OTHER NAVY RATINGS



high in demand in the private sector; and they cost twice as much to train. The SRB is an exceptionally effective management tool to correct shortages in vital skill ratings as they develop without waiting for the lengthy review process involved in approving new funding programs or management authority. Management flexibility, proven results in retention and enhanced material readiness, and the relatively small cost of SRBs make it a very cost-effective program and worthy of Congressional support. Past Congressional action raising the SRB ceiling to $30,000 has improved retention in those mission essential ratings receiving the enhanced bonuses. However, the Congressional restriction that no more than 10 percent of bonuses exceed $20,000 will prevent us from attaining the full potential benefit from this important retention tool. In this connection, nuclear ratings which must have the new top dollar bonuses constitute 8.5 percent of the 10 percent limit, thereby providing little flexibility for other critical skills. I, therefore, urge you to remove the SRB ceiling restrictions or at least change the constraint from 10 to 25 percent.

Our most serious manpower problem is the growing shortage of experienced nuclear-qualified officers (lieutenant commander through captain). These officers are required for at-sea department heads, executive officers, and commanding officers; and for key shore billets directly supporting fleet readiness and nuclear propulsion plant safety. With inventory 18 percent short of requirements at the end of FY 84, sea billets are kept filled by extending sea tour lengths and assigning most officers back-to-back sea tours. Some critical shore billets are not manned. Unless corrected, the experienced nuclear officer shortage will grow to 21 percent by FY 87.

Of equal concern is the critical inventory shortfall of experienced post-command submarine officers, which is projected to grow from 4 percent in FY 84 to 22 percent in FY 90. These officers are essential for manning major sea command billets (*Trident* submarines, submarine tenders, and submarine squadrons). Additionally, their expertise is indispensible in key shore billets involving submarine force operation and safety, strategic planning, tactical development, and program management. We are submitting urgently needed legislative proposals, which modify Nuclear Officer Incentive Pay and Submarine Duty Incentive Pay, to target these essential experienced officers.

A comparison of officer retention rates for 1983 and 1984 is shown in Table Two. Pilot retention dropped 2 percent. Nuclear submarine retention rose only 1 percent, 13 percent below required retention for that community. Unfortunately, we have begun to see the first indications of a reversal of the very positive trend in officer retention begun in 1981 by Congressional programs to restore the purchasing power of military pay. The number of officers submitting letters of resignation in 1984 stating a request to resign in 1985 rose dramatically (pilots: 188 to 328; nuclear submariners: 211 to 279; surface officers: 385 to 459). Reasons for the recent increases in officer resignations are many—eroding pay value, improving economy, lower rates of unemployment, and increased hiring by civilian industries.

To halt these negative trends in critical officer skill inventories, I urgently request your support for our proposals to enhance Nuclear Officer Incentive Pay, extend authority for Aviation Officer Continuation Pay, and improve targeting of Submarine Duty Incentive Pay.

Because of capped and delayed pay raises in FY 84 and FY 85, all naval personnel, not just the officer communities discussed above, have seen the purchasing power of their income erode. As I pointed out earlier, young Americans today demand the opportunity for upward mobility and economic advancement; if they do not find it in the Armed Forces, they will seek it elsewhere. We have recently begun to see the first signs of their seeking it elsewhere. To stem this trend before it fully develops, I most strongly encourage the Congress to support the DOD military pay raise request.

In addition to ensuring that military basic pay remains comparable with the private sector, I also solicit your support for the personnel-related initiatives in the FY 86 budget which include adequate travel and transportation reimbursements, provision of dependent dental care, amendment of the Defense Officer Personnel Management Act (DOPMA), and adequate funding of the Permanent Change of Station (PCS) account.

Additionally, I must express my concern over an IRS proposal that would, in effect, tax the presently non-taxable housing allowance of military personnel who live in homes they own. Indeed, such an action would be counter to a 1925 U.S. Court of Claims decision exempting military allowances from taxation and contrary to the spirit and letter of Congressional military compensation acts dating from 1965 which incorporate income tax advantages as a part of military pay levels. The impact of adopting the IRS tax policy would be that about 300,000 military homeowners would suffer a 3 to 7 percent pay cut. Such a policy, if adopted, would have an immediate and drastic impact on our retention efforts, and, hence, our readiness. I strongly solicit your support to maintain the existing and long-standing tax policy regarding military homeowners. It is fundamental to the military total compensation system and should never be addressed in isolation as some propose.

TABLE TWO

OFFICER RETENTION

FY 82	ELIG TO RETAIN	RETENTION GOAL	ACTUAL RETAINED
SURFACE WARFARE	1,032	49%	440 (43%)
PILOT	919	60%	454 (49%)
NAVAL FLIGHT OFFICER	405	68%	295 (73%)
NUCLEAR SUBMARINE	319	63%	123 (39%)
GENERAL UNRESTRICTED LINE	212	45%	94 (44%)

FY 83	ELIG TO RETAIN	RETENTION GOAL	ACTUAL RETAINED
SURFACE WARFARE	1,065	48%	473 (44%)
PILOT	777	60%	450 (58%)
NAVAL FLIGHT OFFICER	281	73%	207 (74%)
NUCLEAR SUBMARINE	292	57%	135 (46%)
GENERAL UNRESTRICTED LINE	251	54%	151 (60%)

FY 84	ELIG TO RETAIN	RETENTION GOAL	ACTUAL RETAINED
SURFACE WARFARE	1,164	52%	583 (50%)
PILOT	647	60%	364 (56%)
NAVAL FLIGHT OFFICER	145	79%	117 (81%)
NUCLEAR SUBMARINE	343	60%	161 (47%)
GENERAL UNRESTRICTED LINE	294	56%	172 (59%)

FY 85	ELIG TO RETAIN	RETENTION GOAL	PROJECTED RETENTION
SURFACE WARFARE	1,160	49%	549 (47%)
PILOT	647	60%	343 (53%)
NAVAL FLIGHT OFFICER	389	75%	292 (75%)
NUCLEAR SUBMARINE	370	55%	178 (48%)
GENERAL UNRESTRICTED LINE	356	60%	220 (62%)

Military retirement benefits are another particularly important tool which supports our retention efforts and helps in recruiting. In survey after survey of Navy men and women, retirement benefits are mentioned as figuring prominently in the decision to re-enlist. Conversely, many of our sailors who decide not to re-enlist cite uncertainty over the future of retirement benefits as a factor in their decision to leave the Navy. I cannot emphasize strongly enough the importance of the military retirement program. I encourage you to make it clear early in the Congressional year that there will be no changes to that system which would take away benefits earned in good faith.

The contributions of civilians to readiness is crucial. The removal of civilian end strength controls by Congress last year provides us the opportunity to be more efficient and economical in managing our civilian manpower resources, over half of which are dedicated to shore support efforts and directly related to our operational readiness posture. This action enhances our ability to respond to unexpected workload demands; allows us to devote more attention to employee training, thereby contributing to higher retention of skilled personnel; and allows us to avoid turbulent and costly end-of-year terminations and rehiring procedures. I urge you to extend the waiver of civilian manpower controls. I also encourage you to allow us to target salaries to attract civilians with special education and skills, as we continue to have difficulty recruiting top-quality civilian engineers. We need an alternative personnel management system for scientific and technical personnel in the Federal Government: one that will simplify the federal personnel system and provide the flexibility we need to respond to changing salary demands. This approach has been demonstrated at two of our Navy laboratories with considerable success. The substitution of broad pay bands for the present narrowly articulated civilian paygrades represents an important improvement in effectiveness and is worthy of your consideration.

There is considerable speculation about changes in the civil service retirement system. Constructive changes are needed to put the system on a sound footing. We need your support to assure our civilians that we are fair employers and that changes will be equitable to those who have been faithful and competent employees of long standing.

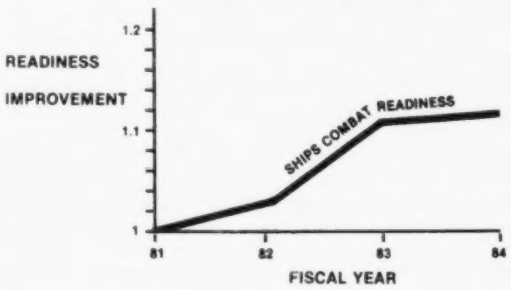
Material

Material readiness complements personnel readiness in overall calculations of mission readiness. If equipment is not operating properly, the best efforts of our personnel will be of little consequence. Maintaining equipment in good material condition is a many faceted program including adequate supplies of the right parts, periodic overhauls and maintenance availability periods. In that respect, a ship or aircraft is just like your automobile; if you maintain it properly and at the right intervals, the engine starts when you turn the ignition key.

We have made a concerted effort to increase funding in support of material readiness. In addition to the dramatic increases in ship combat readiness shown in Figure Nine, aircraft mission capable rates,

FIGURE NINE

SHIP MATERIAL READINESS IMPROVEMENT

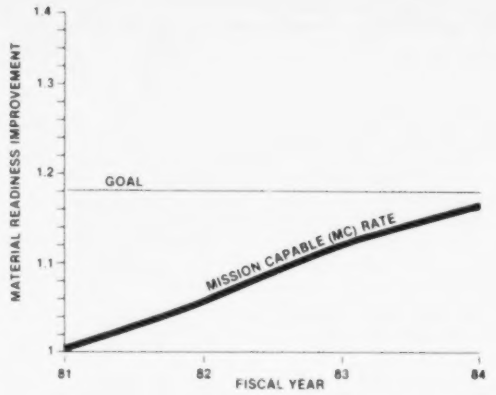


indicators which measure the level of personnel manning and training as well as funding for spare parts and equipment, continued to increase during the past year. As shown in Figure Ten, we are closing the gap on an important milestone—achievement of the long-standing force wide goal of 70 percent mission capable aircraft. Indeed, we reached the 67 percent level last year and project attainment of the 70 percent goal this year.

The FY 86 budget request continues to emphasize improvement in all aspects of material readiness. Funding in the ship overhaul program has been increased to provide for the overhaul of 35 active and six Reserve ships. Adequate Congressional funding to meet overhaul requirements as well as our initiatives to extend the operating period between overhauls for our surface ships and submarines have eliminated the large backlogs we experienced in the past. Close, continual monitoring of equipment material readiness permits us to overhaul selected systems of ships during regular maintenance availabilities (two to three months) without assigning the ship to a shipyard for a year or longer. Our experience to date with nuclear attack submarines in this program is illustrative. These submarines were overhauled every 43 months; we now have extended that period to 84 months. In so doing, we saved approximately $1 billion in maintenance costs and gained 5 percent more operational availability.

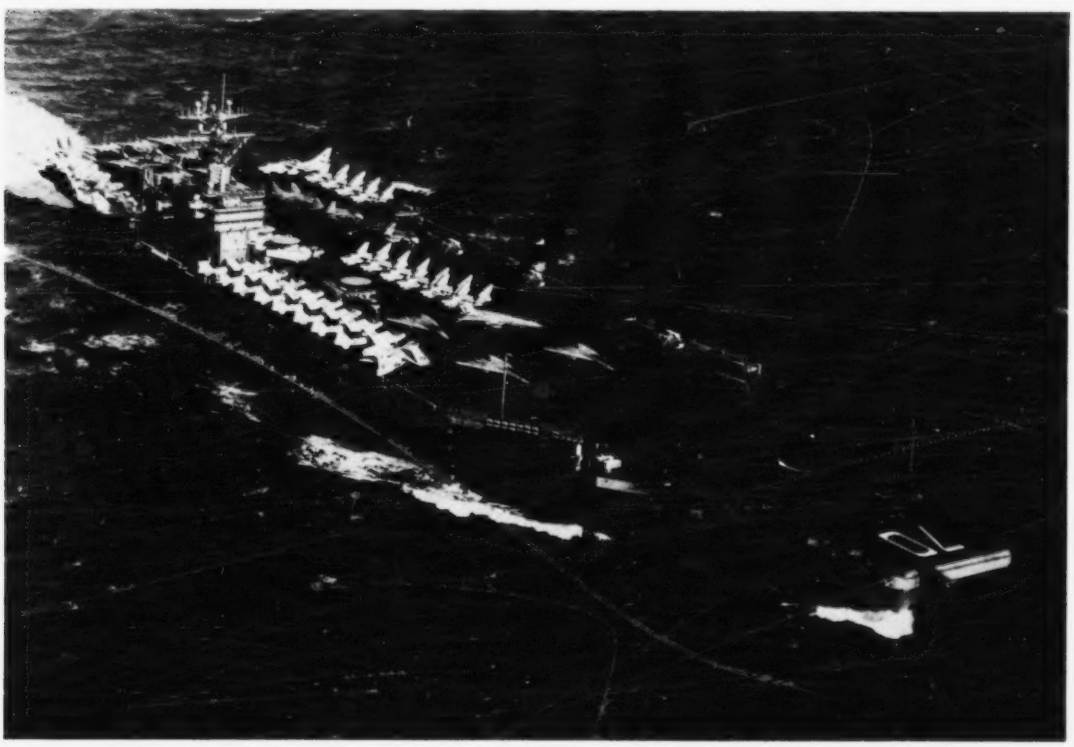
We have also taken action to control the cost of overhauls. We have developed standard work scopes for submarines which will be used to compare performance and promote competition between shipyards. Already several inefficient practices have been identified and corrected. I expect these initiatives to improve submarine overhaul and maintainance and help control costs.

FIGURE TEN
AIRCRAFT SQUADRON
MATERIAL READINESS IMPROVEMENTS



We initiated several programs last year to improve material readiness and reduce costs in the aviation maintenance community. Let me mention one effort we are particularly pleased with—Aircraft Service Period Adjustment (ASPA) program.

With respect to the ASPA program, we share the concern expressed by previous Congresses that airframe rework performed on a calendar basis did not adequately account for the actual condition of the aircraft. Accordingly, beginning Jan. 1, 1984, we initiated several management changes. Almost every aircraft is inspected near the end of its operational service period. If the aircraft is in satisfactory condition, the rework requirement is deferred one year. At the end of the year, the aircraft is reinspected and re-



worked if not in satisfactory condition. The aircraft is grounded if insufficient funds are available for rework.

Experience with the ASPA program has been very positive with 209 aircraft deferred to date. Funded Standard Depot Level Maintenance slots were utilized to rework aircraft currently in the extension backlog. As a result, dollars were expended on aircraft most urgently in need of maintenance. If projections concerning deferral probabilities prove correct, the extension backlog will be eliminated by the end of FY 85.

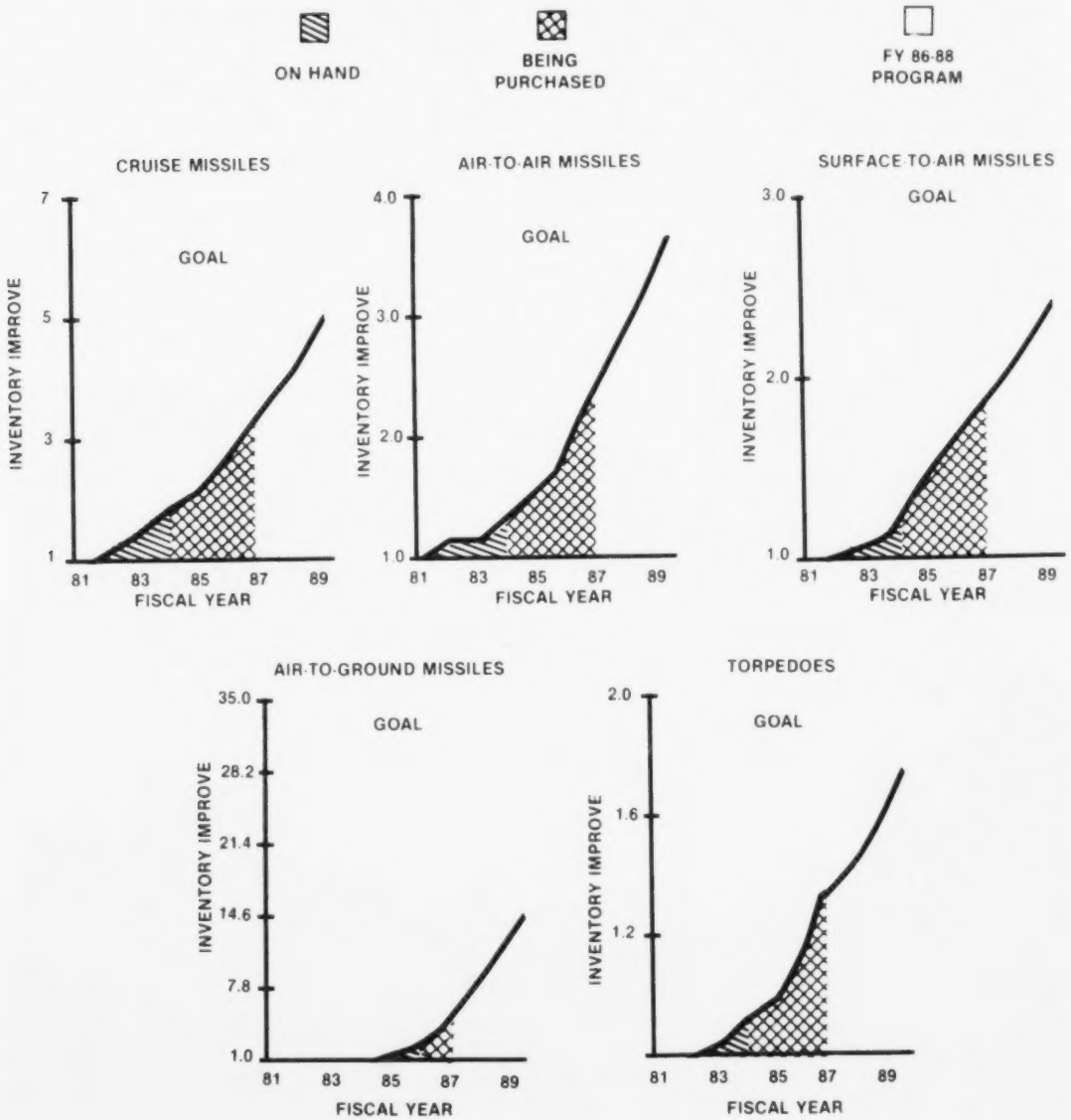
Sustainability

As noted earlier, sustainability represents the "staying power" of a force. If readiness reflects the capability of the force to fight at the outset of a conflict, sustainability is the force's capability to continue fighting until objectives are met and favorable peace terms are attained.

Reflecting fiscal and managerial emphasis, we have achieved impressive improvements in sustainability since 1981. Again, just in the case of readiness, sustainability improvements are based on empirical measurements, not subjective judgments. Some of the criteria used to measure sustainability are inventories of threat ordnance, number of days of Level of Effort (LOE) ordnance, amount of spare parts, number and readiness of Reserves, number of fleet hospital beds, etc. Figure Eleven, normalized to present our progress since 1981, shows dramatic increases in cruise missiles, air-to-air missiles, surface-to-air missiles, air-to-ground missiles, and torpedoes. Figure Twelve shows

FIGURE ELEVEN

TRENDS IN WEAPONS AT SEA



the emphasis we have placed on funding for spare parts.

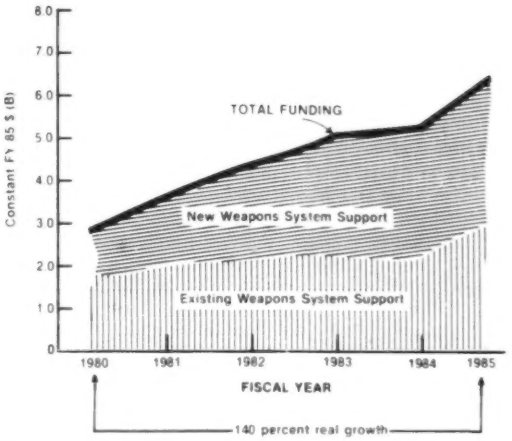
We have made steady headway toward a sufficient level of in-theater medical health care and support; an important factor in sustainability. For example, in FY 83 we started procurement of 1,500 fleet hospital beds and we had no hospital ships. By the end of FY 86, we will have begun procurement of over 5,000 fleet hospital beds. Our first hospital ship, USNS *Mercy* (T-AH 19), will be commissioned next year and the second hospital ship, USNS *Comfort* (T-AH 20), will be commissioned in FY 87. We intend to continue the emphasis on in-theater health care and support including manpower, training, and military construction. We look forward to your continued support.

In 1980, sustainability accounted for just barely 4 percent of the Navy budget. That figure has more than doubled, with sustainability representing nearly 10 percent of the FY 86 budget request. Looked at another way, sustainability funding between 1980 and 1986 will increase by 135 percent (real growth) while overall Navy TOA will increase by approximately 53 percent. As indicated in Figure Thirteen, sustainability funding has grown more than any of the other budget pillars between 1980 and 1986.

I particularly want to highlight the FY 86 request for the Navy Stock Fund War Reserve program. A portion of this request, $59 million, will be used for prepositioned material for the Reserve Mobile Construction Force. The major increase of $133 million for sustainability reflects fleet commanders' in chief requests and achieves nearly full funding for the

FIGURE TWELVE

TOTAL SPARES FUNDING



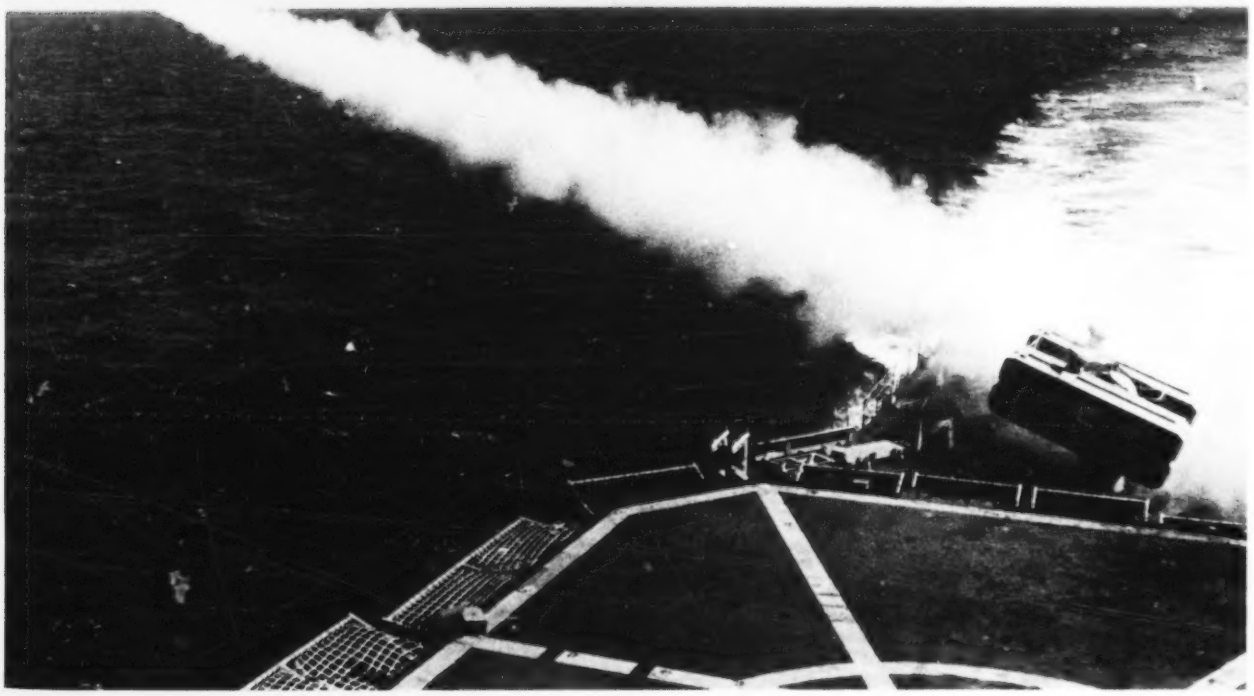
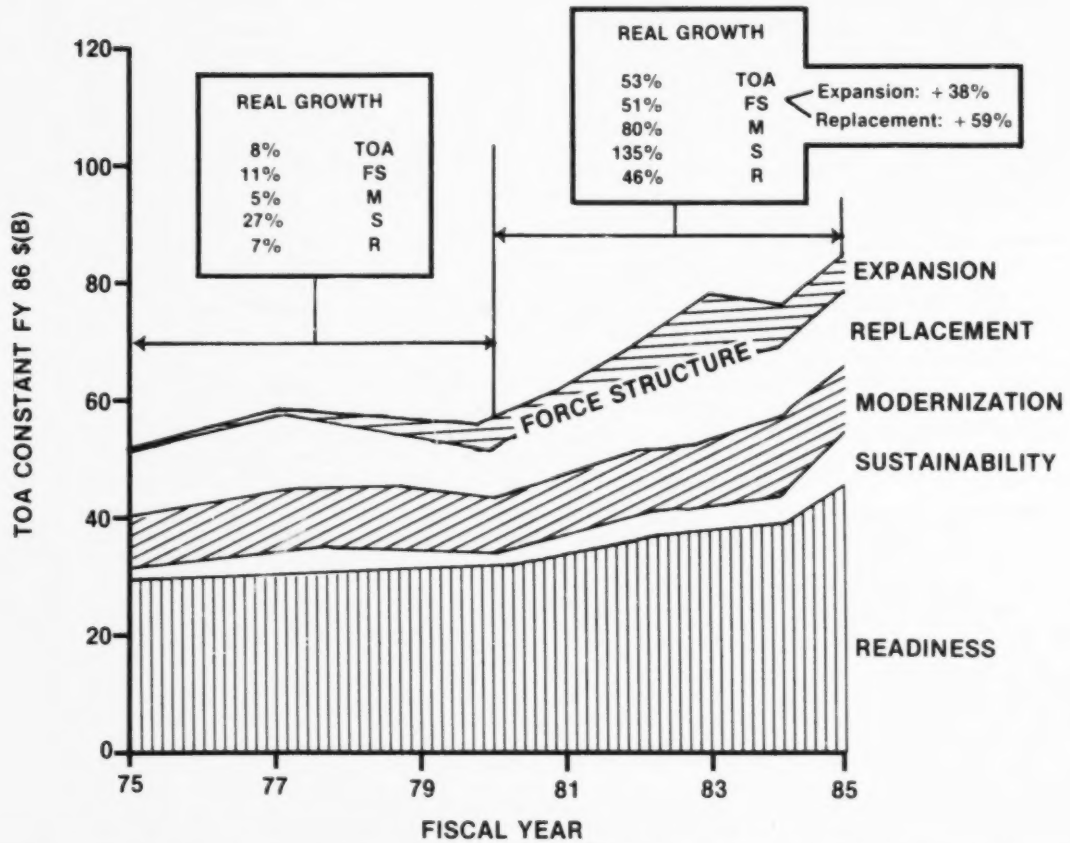


FIGURE THIRTEEN

NAVY TOA TREND

FOUR PILLARS TRENDS NAVY TOA



Department of Defense sustainability objective.

I must, however, report that cross-decking of some categories of weapons to complete load outs for deploying forces was necessary in 1984. While the problem still exists, the cross-decking requirement has declined substantially and continued improvement is projected. Indeed, by 1989 the cross-decking requirement will be eliminated for combatants. This improvement reflects the fact that we have programmed approximately 60 percent of sustainability dollars for the purchase of ordnance.

Because funding for Reserve forces is a component of the sustainability pillar, I want to highlight several important programs in the FY 86 budget request which are essential in sustaining and further improving the effectiveness of the Naval Reserve.

As I mentioned earlier, the SAM program has been very successful in attracting non-prior service junior enlisted personnel for the Selected Reserves. An important tool for recruiting non-prior service critical skill personnel is the enlistment bonus and educational assistance programs, and the authority for them expires at the end of this fiscal year. The request for extension of that authority, at an increased level, is a high priority in the FY 86 program. The budget request also contains provisions for affiliation and re-enlistment bonuses for recruiting and retaining prior service personnel for the Selected Reserve. In addition, we have proposed a unit incentive pay package to recognize the extra contribution made by Selected Reserve crew members of Naval Reserve Force ships. The TAR community has taken on new importance in the expanded Naval Reserve Force. To attract and retain enlisted TARs with critical skills, we are requesting authority for a TAR Selective Re-enlistment Bonus.

Modernization

Modernization, approximately 20 percent of the FY 86 budget request, encompasses RDT&E, SHIPALTS, and aircraft and weapons modifications. A balanced program must allocate sufficient funding to the modernization pillar to ensure that the Navy of the future will remain capable of dealing with the projected threat. Modernization is second only to sustainability in the rate of real growth between 1980 and 1986 in the Navy budget. During this period, modernization funding increases at a rate of 80 percent. Indeed, the most significant real program growth in the FY 86 request over FY 85 occurs in RDT&E.

Why have we placed this type of emphasis on modernization? The answer is clear. While we have

the most capable Navy in the world, we must ensure that it keeps pace with advances in technology, or we soon will fall behind. Our principal and most threatening potential adversary, the Soviet Union, has a decided numerical advantage. The Soviet submarine threat, in particular, is dramatically increasing in numbers and quietness. We offset that quantitative disadvantage by qualitative superiority. Qualitative superiority is made possible only through continuing efforts at fleet modernization.

Research and development provides the foundation for fleet modernization. Successful results of many research and development programs are now entering the fleet and improving capability across the board. The FY 86 budget request continues to stress research and development and builds on Congressional support of these efforts in the FY 85 budget. The FY 86 budget request provides 4.5 percent real growth over FY 85 in the vital technology base area. The technology base program has been adjusted to allow 8 percent real growth per year after FY 86. Strategic programs in our RDT&E request include *Trident II*, while key tactical programs are JVX *(Osprey)*, A-6 upgrade, F-14D, SUBACS, SSN 21, DDG 51, New Threat Upgrade (NTU), MK-50 advanced lightweight torpedo, surface ship torpedo defense, and the 5-inch rolling airframe missile.

The new design SSN, SSN 21, represents a significant improvement in submarine tactical capabilities, including optimized quieting, higher tactical speed, better sensors, more effective combat systems, greater firepower and an arctic warfare capability. These programs are absolutely essential to ensuring our continued qualitative superiority over the Soviets.

Several other programs in the FY 86 modernization request hold special significance. We plan to install the Vertical Launch System (VLS) in the *Ticonderoga* class cruisers beginning with the sixth ship and in all *Arleigh Burke* class destroyers. Additionally, we have programmed funds to place VLS in DD 963 and SSN 688 classes. The importance of VLS is hard to overemphasize. The flexibility of weapons load out which VLS provides and the attendant reduction in launcher system maintenance requirements is extraordinary.

The MK-48 Advanced Capabilities (ADCAP) torpedo program remains essential to ensure the continuation of our key anti-submarine warfare advantage over a vastly and rapidly improving Soviet submarine threat. Equally important in maintaining and extending our ASW advantage is the SH-3H carrier helicopter replacement, SSN 688 improvement, SQS-53B/C sonar and LAMPS MK III ASW helicopter. Vigorous research initiatives are under way to ensure that we retain our superiority in ASW.

Installation of NTU in selected pre-*Aegis Terrier* and *Tartar* guided missile ships will provide critically needed near-term battle group assets to counter air and cruise missile threats as we transition to *Aegis*-equipped *Ticonderoga* class cruisers and *Arleigh Burke* class destroyers. The NTU system improves surveillance and target tracking performance and provides SM-2 Block II surface-to-air missile capability in these ships. The NTU/SM-2 Block II combat system enables us to engage more targets simultaneously at ranges two to three times greater than that of the SM-1 missile. These modernization improvements are significant, much needed, and will provide an affordable threat response until *Aegis* ships are available in sufficient numbers.

The FY 86 modernization of the amphibious forces continues with funding for a three-ship multiyear procurement of the LHD 1 class ship. These ships represent the cornerstone of our plan to expand amphibious lift capabilities and typify the new character

of amphibious warfare as it transitions to an over-the-horizon capability. Similar in design to LHA class ships, the LHD provides large spaces for transporting troops, vehicles, and cargo in amphibious assault. It can carry three Landing Craft Air Cushion vehicles and many helicopters. The LHD 1 also is capable of supporting V-STOL aircraft and can be used, if required, as a substitute for our large-deck aircraft carriers.

Although qualitative and quantitative gains in ships, aircraft, and weapons are central to maintaining our present edge, the total effectiveness of these forces can be no better than the command, control, and communications systems we rely on as the sensor-to-shooter links necessary for coordinated long-range operations. Thus, the FY 86 budget request also contains several important command and control modernization programs which will enhance our capability to direct naval forces and their weapons in accordance with a timely and accurate tactical picture derived from multiple sensors. These programs include: Relocatable Over-the-Horizon Radar (R-OTHR), Advanced Combat Direction System (ACDS), Joint Tactical Information Distribution System (JTIDS), Anti-Jam High Frequency Radio, and the tri-service/NATO interoperable MK XV Combat Identification System. Joined with command/control capabilities already in place, these developments complete an integrated information system to facilitate both coordinated defense of our naval forces and targeting at over-the-horizon ranges. Finally, the Navy continues to make major investments in cryptographic security equipment to protect our communications against technical and tactical exploitation by our adversaries.

FY 86 Force Levels

We learn many lessons from at-sea exercises and war games at the Naval War College. One of the lessons which came through clearly at the Global War Game held at the Naval War College in Newport last summer was that while it is important to have a sufficient supply of conventional ordnance for a protracted war, it is equally important to have sufficient numbers of aircraft and ships to deliver the ordnance on enemy targets during a protracted war.

A balanced program must include funding for an adequate number of ships and aircraft. Our FY 86 force structure request is $18.5 billion or 20 percent of the requested TOA. This includes funding for 23 new ships and five conversions of existing ships. New construction includes one *Trident* submarine, four *Los Angeles* class attack submarines, three *Ticonderoga* class cruisers, four MCM 1 class ships, four MSH 1 class ships, two LSD 41 class amphibious ships, one LHD 1 class ship, two TAO 187 class ships, and two TAGOS class ships. Our first TAGOS ships, USNS *Stalwart* (T-AGOS 1) and USNS *Contender* (T-AGOS 7), recently completed very successful certification trials in both the Atlantic and Pacific. These mobile ASW surveillance system ships are important complements to our fixed surveillance systems and will enhance our ability to posture forces to deal with changes in Soviet submarine deployment patterns.

Aircraft procurement for FY 86 will maintain inventories matched to force levels, with 322 total aircraft requested. FY 86 is the last procurement year for the F-14A (18 aircraft) with the TF-30-P-414A engine. Beginning with FY 87, the F-14A will have an operationally superior engine, the GE F-110. FY 86 marks the first production year of the CH/MH-53E proposed multi-year program. Four CH-53Es and 10 MH-53Es are planned for the initial year of production. The MH-53E will be the mainstay of our airborne mine countermeasures force, replacing the older and less capable RH-53D. Also beginning with FY 86, the E-2C will receive the upgraded T56-A-427 engine which will improve flight safety and provide power for increased weight.

Important new start items in the FY 86 aircraft modification program include the modification to integrate the High-speed Anti-Radiation Missile (HARM) into the A-6, procurement of a new intercommunications system (ICS) replacement for the S-3 aircraft, and incorporation of survivability and vulnerability improvements in several combat aircraft. Some important ongoing aircraft modification programs in FY 86 include: A-6 TRAM, (target recognition attack multisensor), structural and TF-30 engine improvements in the F-14, H-46 safety, reliability, and maintainability update, H-3 SLEP, S-3 weapons system improvements, and ALQ-126B-kit procurement.

After thorough review, we have decided to proceed with the E-6A as the replacement for EC-130 TACAMO aircraft. This highly capable platform will permit connectivity with *Trident* submarines throughout the broad ocean area and will assure survivability of this vital strategic communications link in the face of a growing threat.

The naval aircraft procurement and modernization programs have been carefully considered and balanced to satisfy our needs to support 15 carrier battle groups and 14 active deployable air wings. Two upgraded Naval Reserve air wings will meet mobilization requirements by filling the deck of the 15th carrier and the carrier undergoing SLEP.

Conclusion

We pray for an orderly and peaceful world where wisdom and judgment prevail and the condition which I call "violent peace" becomes little more than a memory. Regrettably, I fear we must anticipate a continuation of the unrest and low-level conflict which has characterized this decade. Terrorist acts, in all likelihood, will continue and be more destructive, more violent, and more frequent in occurrence. Continued economic deterioration in the Third World could lead to even greater instability.

If the past provides insight for the future, we must anticipate that the Navy will be the instrument most often employed by the National Command Authority both in response to emergent crises and pro-actively as a deterrent to prevent crises from occurring. In either case, the Navy will be responsible to prevent the escalation of violence and reduce the probability of events leading to superpower confrontation. Today, as a result of your support, the Navy is fully prepared for such contingencies.

As the United States transitions to a defense-oriented strategic deterrence posture, our ballistic missile submarine force will be crucial to strategic nuclear stability. Moreover, the conventional deterrence provided by ready and capable naval forces forward deployed to areas of U.S. vital interests will foster continued solidarity with our allies and deny the Soviets any hope of achieving their goals through a major conventional conflict.

The FY 86 Navy budget request has been carefully prepared to ensure our readiness to fulfill national security objectives. The budget gives us the capabili-

ty to maintain deterrence across the spectrum of conflict from crisis response to global war with a high level of confidence.

Because of your support in restoring this nation's naval muscle, and our constant efforts to reduce costs and increase efficiency, less fiscal growth is required during the second half of the decade. We need only slightly more than half the growth required during the first half of the decade. The program which we have proposed will maintain the maritime superiority so essential to our national security.

The Navy's role in maintaining national security while deterring conflict will remain crucial in the unstable, violent world in which we live. We recognize our unique responsibilities in deterring violence across the spectrum of conflict and controlling escalation when conflict occurs. We are prepared to respond to the challenges we surely will face. The support of the Congress and the American people, coupled with the selfless professionalism of the men and women in naval uniforms who give 110 percent every day, guarantee that the Navy will continue to be at-sea, underway, helping to protect and preserve the ideals cherished by the people of this great nation.

1. SUMMARY OF U.S. NAVAL FORCES

(As of 1 January 1985)

A. STRATEGIC FORCES		
SSBN		36
SUPPORT		6
	SUBTOTAL	42
B. TOTAL STRATEGIC FORCES		42
C. BATTLE FORCES		
AIRCRAFT CARRIERS		9
CVN		4
	SUBTOTAL	13
D. SURFACE COMBATANTS		
BB		2
CG		26
CGN		9
DD		31
DDG		37
FF		53
FFG		44
	SUBTOTAL	196
E. SUBMARINES		
SS		4
SSN		95
	SUBTOTAL	99
F. AMPHIBIOUS WARFARE		59
MOBILE LOGISTIC SHIPS		53
PATROL COMBATANTS		6
MINE WARFARE		3
	SUBTOTAL	121
G. TOTAL BATTLE FORCES		429
H. SUPPORT FORCES		
MOBILE LOGISTIC		21
SUPPORT SHIPS		25
	SUBTOTAL	46
I. TOTAL SUPPORT FORCES		46
J. MOBILIZATION FORCES (CATEGORY A)		
SURFACE COMBATANTS (DD/FF/FFG)		10
AMPHIBIOUS WARFARE SHIPS		2
	SUBTOTAL	12
K. TOTAL MOBILIZATION FORCES		12
L. TOTAL U.S. NAVAL FORCES		529

NAVY AIRCRAFT PROGRAM INVENTORY

(As of 1 January 1985)

STRIKE FIGHTER		134
FIGHTER		878
ATTACK		1284
ANTI-SUBMARINE		168
PATROL		427
WARNING		148
TRANSPORT		138
INFLIGHT REFUELING		60
TRAINERS		1156
SPECIAL MISSION		6
OBSERVATION		94
UTILITY		114
HELICOPTERS		1437
DRONES		39
	TOTAL AIRCRAFT	6083

2. NAVY FIVE YEAR SHIP CONSTRUCTION/CONVERSION PLAN

	FY 86	FY 87	FY 88	FY 89	FY 90
A. NEW CONSTRUCTION					
TRIDENT	1	1	1	1	1
SSN 688	4	4	4	2	4
SSN 21				1	
CG 47	3	3	3	2	
DDG 51		2	5	5	5
LSD 41	2				
LHD 1	1		1	1	1
LSD 41 (VAR)			2	2	2
MCM	4	1			
MSH 1	4	4	4	4	
AR					1
TAO 187	2	2	2	2	2
TAGOS	2	2			
TAGS					
AE			1	1	1
AOE-6		1	1	1	1
AFDM			1		1
TOTAL UNITS	23	20	25	22	19

B. SLEPs, CONVERSIONS, AND REACTIVATIONS	FY 86	FY 87	FY 88	FY 89	FY 90
LPD-4 SLEP			1	3	3
CV SLEP		1			1
BB REACT		1			
AO JUMBO			1	2	2
TAVB (Conv)	1				
TACS (Conv)	3	2	2		
AG (Conv)	1				
TOTAL UNITS	5	4	4	5	6

3. NAVY FIVE YEAR AIRCRAFT PROCUREMENT PLAN

TYPE	FY 86	FY 87	FY 88	FY 89	FY 90
A-6E/F	6	6	12	12	12
EA-6B	12	12	9	9	9
AV-8B	46	47	48	60	35
F-14A/D	18	18	12	24	24
F/A-18	84	102	120	122	146
CH-53E	14	14	14	14	11
AH-1T	22	—	—	—	—
SH-60B	18	18	18	18	18
CV IZ HELO	—	7	24	30	30
P-3C	9	3	8	8	8
RP-3D	—	—	1	1	1
JVX	—	—	—	18	42
E-2C	6	6	6	6	6
SH-2F	6	—	—	—	—
C-9	—	—	—	—	—
UC-12B	12	12	—	—	—
C-2	8	9	—	—	—
T-34C	38	50	—	—	—
T-44	—	15	—	—	—
ADVERSARY	12	—	—	—	—
T-45A	—	—	12	24	24
TH-57	—	—	—	—	—
E-6A	2	4	6	2	—
KC-130T	—	—	—	—	—
VH-60	9	—	—	—	—
UH-60	—	—	—	—	—
TOTAL UNITS	322	329	290	346	368

GENERAL PAUL X. KELLEY, USMC

General Paul X. Kelley is the Commandant of the Marine Corps, Headquarters Marine Corps, Washington D.C.

General Kelley was born on Nov. 11, 1928, in Boston, Mass. He graduated from Villanova University with a B.S. degree in economics and was commissioned a Marine second lieutenant in June 1950.

In March 1951, after completing instruction at The Basic School, Quantico, Va., he served consecutively as a platoon leader, assistant battalion operations officer and assistant division training officer with the 2d Marine Division, Camp Lejeune, N.C. He was transferred to the USS *Salem,* flagship of the 6th Fleet, during September 1952, serving as the executive officer and then the commanding officer of the Marine detachment for a period of 20 months. He was promoted to captain on Dec. 16, 1953.

He was ordered to Camp Pendleton, Calif., in July 1954, where he served as a battalion executive officer with the 1st Infantry Training Regiment. Transferred to Japan in February 1955, he served as the division training officer, 3d Marine Division. From August 1955 to June 1956, he served as the aide-de-camp to the deputy commanding general, and then as assistant force training officer, Fleet Marine Force, Pacific, in Hawaii.

Returning to the United States in July 1956, General Kelley became the special assistant to the Director of Personnel at Headquarters Marine Corps, Washington, D.C., until Dec. 1, 1957. Following his assignment in Washington, he completed the Airborne Pathfinder School at Fort Benning, Ga. In February 1958, he was assigned to the newly activated 2d Force Reconnaissance Company, Force Troops, Fleet Marine Force, Atlantic, Camp Lejeune, where he served as the executive officer and then commanding officer.

From September 1960 to May 1961, he was the U.S. Marine Corps exchange officer with the British Royal Marines. During this tour he attended the Commando Course in England, served as assistant operations officer with 45 Commando in Aden, and as Commander "C" Troop, 42 Commando in Singapore, Malaya and Borneo. On March 1, 1961, he was promoted to major.

He was assigned to Marine Corps Schools, Quantico in July 1961 and served there as a tactics phase chief at The Basic School; and then reconnaissance and surveillance officer at the Marine Corps Landing Force Development Center.

In June 1964, he assumed duties as Commanding Officer, Marine Barracks, Newport, R.I. He remained at that post until August 1965, when he was transferred to Vietnam and reported to the 3d Marine Amphibious Force, FMF, Pacific, as the combat intelligence officer. Following this assignment, he served as the Commanding Officer, 2d Battalion, 4th Marine Regiment in Vietnam. He was promoted to lieutenant colonel on Jan. 20, 1966. During this tour as battalion commander, he earned the Silver Star Medal, the Legion of Merit with Combat "V" and two awards of the Bronze Star Medal with Combat "V".

From Vietnam, he proceeded to the U.S. Army Infantry School at Fort Benning, where he served from August 1966 to July 1968, as the Senior Marine Corps Representative of the Commandant of the Marine Corps. He then attended the Air War College, Maxwell Air Force Base, Ala., graduating as a "Distinguished Graduate" in May 1969. For his excellence in politico-military strategy while a student at the Air War College, the board of trustees of the National Geographic Society elected him a life member.

He returned to Headquarters Marine Corps in June 1969 as the military assistant to the assistant commandant. He was promoted to colonel on April 1, 1970, and in June 1970 was reassigned to Vietnam where he commanded the 1st Marine Regiment, 1st Marine Division. General Kelley redeployed the regiment, the last Marine ground combat unit to leave Vietnam, to Camp Pendleton, in May 1971. During his second tour in Vietnam, he was awarded a second Legion of Merit with Combat "V."

Reassigned to the Washington area in July 1971, General Kelley served as the Chief, Southeast Asia Branch, Plans and Policy Directorate, Organization of the Joint Chiefs of Staff, where he remained until November 1973, when he was assigned as the executive assistant to the Director, Joint Staff. Upon completion of this tour, he was awarded a third Legion of Merit.

Following his promotion to brigadier general on Aug. 6, 1974, he was assigned as the Commanding General, 4th Marine Division.

In June 1975, General Kelley was ordered to the Marine Corps Development and Education Command,

at Quantico, where he assumed the duties as Director, Development Center. He assumed duties as Director, Education Center and was advanced to the grade of major general on June 29, 1976.

In May 1978, General Kelley was ordered to Headquarters Marine Corps, where he became deputy chief of staff for requirements and programs.

On Feb. 4, 1980, General Kelley was promoted to lieutenant general and appointed by the President as the first commander of the Rapid Deployment Joint Task Force (renamed the United States Central Command (USCENTCOM) in January 1983), a four-service force with headquarters at MacDill AFB, Tampa, Fla.

General Kelley was promoted to the rank of general and assumed duties as Assistant Commandant of the Marine Corps and Chief of Staff on July 1, 1981. He assumed his present office as Commandant of the Marine Corps on July 1, 1983.

General Kelley's personal decorations and awards include: the Silver Star Medal; Legion of Merit with Combat "V" and two gold stars in lieu of second and third awards; the Bronze Star Medal with Combat "V" and a gold star in lieu of a second award; the Joint Service Commendation Medal; Navy Commendation Medal; and the Army Commendation Medal. He is a Marine Corps parachutist and U.S. Army master parachutist.

General Kelley and his wife, the former Barbara Adams of Fall River, Mass., have a daughter, Mrs. John Cimko.

A Report By General Paul X. Kelley U.S. Marine Corps Commandant of the Marine Corps On The Posture, Plans, and Programs for Fiscal Year 1986 through 1990

Mr. Chairman, distinguished members of the Committee:

It is again my privilege to report to you on the current and future posture of your United States Marine Corps.

Before I begin, I wish to thank the members of the Committee and the entire Congress for the support given to the Marine Corps during the past year. Thanks to you, our combat readiness has never been better. The Corps is well trained, equipped, and supplied for the most demanding of assignments—from low intensity conflict (including countering state-sponsored terrorism) to high intensity, large scale, global commitments. With your continued support the Marine Corps will maintain and hone this readiness and our unique capability to respond to national security needs across the entire spectrum of conflict. The presence of amphibious forces, either routinely deployed or in response to a crisis, provides visible, measured support to deter or prevent escalation of a crisis in support of national policy objectives. Should subsequent force be required, Marines are prepared to rapidly provide the measured response directed.

Fiscal realities, driven by national economic priorities, will require tough Congressional decisions this year. It is my intention, as I report to you today on the current posture of the Marine Corps, to assure you that I remain dedicated to providing sound, accountable stewardship of those resources entrusted to the Marine Corps.

I would emphasize that, measured in terms of structure, training, equipment, mobility, readiness, sustainability, and the positive attitude of the individual Marine, the Corps provides the national defense effort a capable, ready, and flexible resource.

This flexible and responsive capability is unique to the Navy-Marine Corps team. It is unique in the sense that Navy and Marine combat-ready air, ground, and sea forces are routinely forward-deployed around the world. A Marine Air-Ground Task Force (MAGTF) can be tailored for any mission and will vary in size from a Marine Amphibious Unit (MAU) of approximately 2,000 Marines—the type employed in Grenada—to a Marine Amphibious Force (MAF) of about 50,000 Marines. The Grenada example demonstrates the flexibility of the maritime forces and their "no-warning" response capability.

Our vast overseas national interests are assuming an increasingly important role in the interdependent western economic system. These interests are vital to our economic and national security. Continued Soviet military adventurism, their cynical use of surrogates, and the spread of state-supported terrorism, coupled with an increasingly complex international political environment, increase the value of forward-deployed Navy-Marine Corps forces. Through rapid repositioning, Navy and Marine amphibious forces can send a clear, controlled signal of U.S. resolve to both friend and foe.

U.S. maritime strategy reflects the maritime character of our nation and supports protection of our legitimate national interests. The Navy-Marine Corps team works and trains together to provide the capability to establish maritime control whenever and wherever required. I can assure you that, with the support of the Congress and the American people, the Navy-Marine Corps team will continue to provide this capability.

Countering Terrorism

Because of its growing threat, early in my remarks I would like to address state-sponsored terrorism. Terrorism constitutes a new dimension in warfare which will be with us for the foreseeable future. The Marine Corps recognizes that this threat requires the development of unique skills necessary for its defeat. We have turned much of our energies toward establishing a thorough, innovative program to effectively combat terrorism. Let me tell you about our program. The objectives are to have every Marine thoroughly aware of the terrorist threat, realistically trained and educated in how to counter that threat, and armed with the best doctrine, tactics, and equipment we can produce. In addition, efforts are being made to provide our field commanders timely, accurate intelligence concerning terrorist activity and to establish the level of tight security required to deter terrorist attacks against Marine Corps installations, facilities, and deployed units.

Our program consists of a series of completed and ongoing actions that come under seven program areas. The first of these areas is monitoring and coordination. Actions in this category provide centralized control at the Headquarters Marine Corps level and each major subordinate command. We have established the agencies, focal points, and working groups required to efficiently and effectively implement the measures that make up our program, monitor their progress, and provide the field commander the assistance and expertise he may need to develop his security plan.

The second program area is the continuing review and study of the terrorist threat and of our capability to counter it. We have attempted, through a variety of efforts, to make a complete examination of what we are up against and to make an honest assessment of our current capabilities to deal with it. It is clear that this process must be dynamic to combat a constantly changing threat, and we must remain capable of anticipating changes and quickly adjusting tactics, techniques, weapons, and threat locations.

Obviously, any ability to counter the terrorist threat must begin with accurate, timely intelligence. Intelligence is our third program area. Within our Intelligence Division, we have established a Terrorist Threat Section which gives us a direct interface with other intelligence agencies addressing terrorism. This section provides our commanders with the analysis, specific threat reports, and on-site assistance needed to build their local security plans. The Terrorist Threat Section attempts to identify specific threats to Marine Corps personnel or installations and provides timely information, recommendations, and intelligence assistance to the threatened command or region.

In physical security, our fourth program area, we have formally reviewed Marine Corps security requirements for each of our installations and units, and initiated a security upgrade of our facilities. Security enhancements include publishing a new physical security and crime prevention manual, acquiring security equipment and dogs, enhancing military police training, and preparing detailed local security and crisis management plans.

Training and education, our fifth area, is the cornerstone of our program to combat terrorism. An aware, alert, well trained Marine is the key to defeating the terrorist. We have initiated actions in our formal schools and recruit depots to significantly increase instruction on combating terrorism. Additionally, we have introduced correspondence courses, video tapes, films, war games, and mobile training teams to further enhance our training.

Through our sixth program area, we are providing the doctrine, tactics, and techniques necessary for our Marines and their commanders to fight the terrorist. Our new publications will range from policy and guidance for the commander and his staff to the "how to fight" techniques for the Marine on the ground facing the threat. In this regard, we are making full use of members of the Marine Corps Reserve who have special skills and talents in the areas of security and countering terrorism.

In our final program area, operational capability, we have enhanced our ability to operate in a terrorist environment by making certain organizational adjustments, particularly in our security forces, and by establishing and publishing an operational standard to evaluate our units' capabilities. Our operating forces will be provided the security expertise and equipment to enable them to conduct operations at any level of conflict, while retaining the ability to deal with the added threat of terrorist activity.

The Marine Corps is committed to defeating terrorism, rather than coping with it or "weathering it out" as a passing storm. We intend to prove to enemies that terrorism is too costly a tactic to adopt against Marines.

Modernization/Strengthening Programs

I would like to move on to more conventional and familiar matters at this point and briefly review our major modernization programs.

The Department of the Navy (DON) has embarked upon a balanced shipbuilding program designed to meet the "Defense Guidance" objective of sufficient ships to simultaneously lift the assault echelons of a MAF and a MAB. The current Navy shipbuilding plan will fully meet the Marine Corps stabilized lift requirement by FY 94.

The program for our most capable amphibious ship, the amphibious assault ship (multipurpose), LHD 1 *(Wasp)* class, is well under way. Keel laying for USS *Wasp* will be in August. The LHD I class is the linchpin to meeting overall "Defense Guidance" lift objectives. Accordingly, we fully support the Navy request for advance funding for three more of these superb ships.

The lead ships of the LSD 41 class (LSD 41, 42, 43) are invaluable additions to the nation's amphibious capability. USS *Whidbey Island* (LSD 41) was recently commissioned; USS *Germantown* (LSD 42) was launched in June of last year; and LSD 43, as yet unnamed, is scheduled for launching in December of this year. Three additional LSD 41 class ships have been authorized, with plans for two more in this year's defense appropriations request. A derivative class of amphibious ship, based on the LSD 41 hull and optimized for cargo lift, is being developed by the Navy. Additionally, although not a new construction effort, the LPD 4 class of 11 ships is scheduled for a service life extension which will provide an additional 15 years of service life for these very capable ships.

Coupled with the delivery of the LCAC, which I will address in more detail shortly, and the LSD 41s, introduction of the LHD provides the nation's amphibi-

ous forces the opportunity to advance and further refine evolving techniques for the over-the-horizon (OTH) launch option of amphibious forces. The OTH launch will be one of the keystones of successful amphibious warfare in the future.

In addition to the sea lift capability provided by naval amphibious shipping, a competitive, healthy Merchant Marine fleet is essential to the structure of a strong national maritime strategy. Although the existing merchant fleet is being modernized, its size, when considered in the context of supporting a defensive global strategy, causes concern. The Marine Corps strongly supports Congressional initiatives to expand the merchant fleet which concomitantly enhances the national capability to support projection of maritime power.

The Maritime Prepositioning Ships (MPS) concept, the most important and innovative of our crisis-response enhancements, is now a reality. The MPS program represents a significant new dimension in mobility, readiness enhancement, and global response. When national interests are threatened, an MPS squadron can rapidly alter course or get underway to arrive in the crisis area in a matter of days. The strength of the signal of U.S. intent and resolve can be controlled by adjusting the visibility of the MPS squadron. When directed, Marines would be airlifted to the crisis area to marry-up with their equipment and supplies to carry out a variety of missions. I am a firm believer that an ounce of prevention is worth a pound of cure and that when you have the ability to quickly move a 16,500-man Marine brigade to a crisis area, you have a ready-made prescription to prevent that crisis from escalating. MPS is just such a prescription. It provides a force of combined arms with 30 days of essential supplies, available on call. The MPS program is also a bonus for the private sector by assisting in revitalizing our shipbuilding industry and the Merchant Marine fleet which, in turn, enhances our sea lift capability. We have already begun the load out of the first MPS Brigade. The second MPS Brigade will become operational later this year and the third brigade by the end of CY 86. Construction has begun on all of the cargo ships to support the MPS program.

Beginning this calendar year, we will start exercising MPS forces. Selected elements of MPS 1 and 6th MAB intend to participate in conjunction with various fleet, allied, and JCS exercises. As our additional MPS sets become operational, the goal will be one JCS-directed exercise per MPS set each year involving in-stream and pier off-load, marshalling, recall, air movement, and depreservation/represervation techniques.

An important associated initiative is the Aviation Logistic Support Ship (TAVB) program. With either of two TAVB ships available, the aviation combat element of any MAGTF will be provided more rapid intermediate maintenance support once it arrives in the area of operations. The TAVB provides vital support for both helicopter and fixed-wing aircraft, through sea lift of a partial, consolidated, intermediate maintenance activity to a theater of operations. This seaborne maintenance capability permits early introduction of landing force aviation which can expedite the early release of carrier battle groups to other sea control or force projection missions, if needed.

Another strategic mobility enhancement is our prepositioning of selected equipment and supplies in Norway. By doing this we will reduce our response time to the critical Northern flank of NATO from weeks to days. The Norway force, a MAB-sized unit, is a totally integrated, air-ground team under a single commander with a sustainability package specifically tailored for cold weather operations. It is a versatile, formidable force of approximately 13,000 Marines and sailors and over 150 aircraft. Since each MAB is task-organized to accomplish the mission assigned, the Norway MAB meets the unique requirements of the Norway mission, and, consequently, is different from the previously mentioned MPS MAB. This Norway prepositioning program has been designed to provide rapid deployment to an area vital to America and her NATO allies. The program itself sends a clear signal of U.S. commitment and resolve without any requirement to post a single Marine on Norwegian soil. Commitment of the MAB can be accomplished quickly with a minimum of reliance on scarce, strategic airlift.

The prepositioning necessary to make this rapid response work includes only what is mission essential and suitable for long-term storage. It is a pleasure to report that the Norway prepositioning program is proceeding on course, and remains a top defense priority for the Norwegians who have stepped forward to provide an unprecedented level of support. Norway's contribution through host nation support has greatly reduced our total prepositioning requirements. For example, the Norwegian unit assigned to support this MAB will include over 600 personnel and 370 vehicles.

In addition to our strategic mobility improvements, we have made significant strides with our tactical mobility programs, several of which I would like to briefly discuss. The first one is the Landing Craft Air Cushion (LCAC). Loaded on the LSD 41 and other well-deck ships, and launched from OTH, the 40-knot-capable LCAC, in conjunction with the helicopter, will reduce the risk to ships of the amphibious force while enhancing the surprise, mass, and maneuver of the assault forces. The first LCAC has been delivered to the Navy. The initial operational capability for the first six-craft detachment, to be homeported at Camp Pendleton, Calif., is 1986. A second LCAC support base is planned for Little Creek, Va. I am providing a synopsis of all our enhancement programs in Appendix I.

As a result of a service life extension program, we are both enhancing the operational capability of our LVTP-7 amphibious assault vehicles and extending their useful life. A future Landing Vehicle Tracked is being developed concurrently as the follow-on assault amphibian for the current LVT-7 family when it reaches the end of its service life in the late 1990s.

Complementing the improvements in surface lift capability, Marine Corps aviation has supported the development of the MV22A *Osprey*. This tilt-rotor aircraft, known earlier as the JVX, will provide speed and efficiency to the assault and will be capable of lifting ground combat troops, small tactical vehicles, and anti-tank units. Replacing our aging fleet of assault transport helicopters in the 1990s, the *Osprey* can operate at speeds of 250 knots at vastly improved ranges. The CH-53E, the most powerful helicopter in the free world, complements the *Osprey* by providing the required heavy lift capability into the 21st century. Its 16-ton lift capacity is necessary to enhance the operational mobility of the M198 155mm howitzer, the Light Armored Vehicle (LAV), as well as other MAGTF heavy equipment.

Tactical mobility improvements for our ground

Appendix I
Enhancement Programs

Table I-I
Ground Mobility Enhancements

Light Armored Vehicle (LAV)	• Lightweight, flexible, agile fighting vehicle • Firepower-intensive organization 147 LAVs/LAV battalion (CY 83) • Helicopter transportable • Enhanced strategic transportability
Landing Vehicle Tracked LVT-7A1	• Service life extension program began 1982 • Extends use until 1990s • New engine, non-integral fuel tank, all electric weapons station • 327 new LVTs for MPS
Armored Vehicle Launched (AVLB Bridge)	• Eliminates critical shortfall in assault Gap Crossing Capability • Organic to Tank Battalion • Capable of pacing with Armor and AAV Units

Table I-II
Infantry Enhancements

Smaller-Firepower Intensive	• Personnel reduced at battalion level • Firepower up 25 percent
Improved Small Arms	• .50 cal MG—8 per battalion; procured FY 82-83 (IOC FY 83) • Shoulder-launched Multipurpose Assault Weapon (SMAW)—18 per battalion; procurement FY 84-89 • Squad Automatic Weapon (SAW)—68 per battalion; procurement FY 82-87 (IOC FY 84) • M-16 Product Improvement Program (PIP); procurement FY 82-89 (IOC FY 84) • 9mm pistol — Beretta M 92SBF, 9mm pistol — replaces the current .38 and .45 caliber pistols — increased range, lethality, safety, interoperability within NATO — procurement FY 85-89 (IOC FY 86) • M60E3 7.62mm MG PIP; procurement FY 84-85 (IOC FY 85) • MK-19 40mm Grenade Launcher—12 per infantry battalion; procurement FY 82-87 (IOC FY 85)
Mortar Enhancements	• 181mm—proposed procurement FY 85-88 (IOC w/LAV FY 86, IOC w/other FMF units FY 89) • Lightweight Company Mortar deliveries completed FY 83

combat element focus on the acquisition and introduction of a new family of ground transport vehicles. The M939 series 5-ton tactical truck features an automatic transmission which will provide improved performance while simplifying driver training and maintenance. This program will be completed during FY 87.

The 5/4-ton High Mobility Multipurpose Wheeled Vehicle (HMMWV) will be the primary tactical vehicle for combat and combat support units. Its functions will include troop and weapons transport; weapons platform; reconnaissance; fire support; medical evacuation; and command, control, and communications applications. This vehicle will replace most of the current 1/4-, 1/2-, 3/4-, and 5/4-ton trucks, as well as the 1/4-ton trailers. It satisfies the urgent requirement to replace current over-age vehicles and eliminates severe T/E and war reserve deficiencies. The fielding of the HMMWV will begin this year and continue through FY 88.

The mobility enhancements, both strategic and tactical, provide Marines the means to get to, and around, the battlefield. This is only one aspect of the improvements being made to enhance the effectiveness of the Marine Corps. I would like to turn your attention now to our ground forces.

The reorganization of Marine Corps infantry battalions into more firepower-intensive units began in 1983. When reorganization is completed in May of this year, these battalions will have fewer personnel, but their organic firepower will be increased appreciably. This increase is the result of the acquisition of the improved M16A2 rifle, a new Squad Automatic Weapon (SAW), an improved M60 machine gun, the MK19 40mm machine gun, the M2 .50 caliber machine gun,

Table I-III
Anti-Armor Enhancements

Tube-launched Optically-tracked, Wire guided missile (TOW)	• 144 TOW per division; procurement FY 80-86 (IOC FY 84) • Phase I TOW procurement completed FY 81; 5'' warhead and extended range to 3,750M (IOC FY 87) Phase II procurement began FY 81; 6'' TOW warhead, extended range and electrical optical countermeasures (EOCM) (IOC FY 84) • Night sights—144 per division; procurement FY 79-87 (IOC FY 84)
DRAGON	• 8 additional per battalion, total 32 (IOC FY 84) • Night sights—144 per division; procurement FY 79-82 (IOC FY 84)
Tanks	• M60A1—end of service life late 1980s • FY 88 funds planned for replacement of M60A1 with M1A1 • Enhanced lethality, mobility, and survivability
Air Delivered	• Modern armor threat necessitates air-delivered anti-armor weapons which offer increased aircraft survivability and target lethality • Near-term, state-of-the-art, anti-armor weapons being pursued for both fixed-wing and helicopters • *Laser Maverick* fixed wing PGM (IOC FY 85) • *Hellfire* helicopter PGM (IOC FY 86) • GATOR—area/area denial weapon (IOC FY 96) • 25mm multipurpose gun for the AV-8B (IOC FY 85)
Light Anti-Armor Weapons	• Continue to participate with Army in LAW evaluation program • Interested in most cost effective system that meets USMC requirement • Monitor Army's M72 PIP • Develop anti-armor round for the SMAW (IOC FY 88)

the Shoulder-launched Multipurpose Assault Weapon (SMAW), and a new 60mm company mortar.

The Marine Corps' armor defeating capability is also being improved in every area. Each Marine division now has twice as many Tube-launched, Optically-tracked Wire guided missile II (TOW IIs), which are capable of defeating any known threat armor. The TOW II is equipped with a thermal night sight. The *Dragon,* Medium Anti-Armor System, which will also have a thermal night sight, is undergoing a product improve-

Table I-IV
Artillery Enhancements

Conversion to M198	• New improved structure transition began in FY 83; procurement FY 79-82 and FY 86-87 • 105mm howitzer reduction of 162; 155mm howitzer increase of 192
Additional 155mm (SP)	• Increase of 30 tubes—3 batteries by FY 86; total 5 batteries by FY 89
Addition of Target Acquisition Battery	• One each in FY 85, 87, and 88
Precision Guided Projectiles	• Modular Universal Laser Equipment (MULE) procurement FY 82-85 (IOC FY 86) • *Copperhead*—procurement programmed (IOC FY 86)
Family of Scatterable Mines (FASCAM)	• Area Denial Artillery Munition (ADAM) (IOC FY 82), anti-personnel mines and Remote Anti-Armor Mine (RAAM) anti-tank mines—procured FY 81 (IOC FY 83)
Battery Computer System	• Procurement FY 86 (IOC FY 87)

Table I-V
Aviation Enhancements

TACAIR	• AV-8B—responsive, effective CAS • A-6F—effective all-weather, deep-strike medium bomber • F/A-18—superior fighter/bomber, force multiplier • AH-1T+—improved attack helo T-700, *Hellfire* capable • CH-53E—free world's most capable heavy lift helo
Weapons	• *Laser Maverick*—PGM for CAS • *Hellfire*—anti-armor helo delivered PGM • I^2R *Maverick*—deep air support weapon
RDT&E	• MV22A (*Osprey*)—self deployable, medium lift assault transport with strategic and tactical implications • Helo development—T-700 enhanced engine for AH-1T; *Hellfire* MOD for AH-1J/AH-1T *Cobras*; helo night vision enhancements
Airspace Command & Control and Missiles	• AN/TYQ-23—command and control of airspace, aircraft, and missiles • IHAWK—medium range anti-air missile • *Stinger*—shoulder-launched surface-to-air missile
Reserve Modernization	• A-4M—light-attack aircraft to Reserves as AV-8B enters active component • F-4N/S—superb fighter/attack aircraft

ment development that was funded by Congress beginning this year.

The LAV was developed to fill a requirement for increased firepower and tactical mobility within the Marine Corps. The LAV battalion will eventually contain eight configurations of the LAV. Six of these configurations, the LAV-25, LAV Recovery, LAV Mortar, LAV Command and Control, LAV Logistics, and LAV Anti-tank are under procurement. The other two mission-role vehicles, the LAV Air Defense and the LAV Assault Gun, are still in development.

The M60A1, the Marine Corps' main battle tank, is reaching the end of its service life. The M1-A1 tank, which has been approved for service use as the replacement for the M60A1, will provide the Marine Corps state-of-the-art capability.

Our ground mine countermeasures capabilities are being upgraded with the addition of the Catapult Launched Fuel Air Explosive Mine Countermeasures System for the LVTP-7A1, the M58 Trailer-Mounted Line Charge, the track-width Mine Plow for use with a tank, and the M59 Mine Clearance System Kit used with the LVT-7A1 series.

The modernization of Marine Corps artillery is continuing. All towed artillery battalions in the active force will be equipped with 155mm howitzers by the end of the fiscal year. The new M198 howitzers have been included in the prepositioning programs. Additional procurement of M198s for the Reserves is planned for FY 86-FY 87. These howitzers will be used to equip the direct support battalions of the Reserve division. Additional self-propelled, 155mm batteries are being

Table I-VI
Combat Service Support Enhancements

Logistics Vehicle System (LVS)	• Four rear body units; container hauler wrecker, dropside cargo with crane, 5th wheel • Off-road mobility • 60" fording capability • Replaces aging vehicles such as 10 ton and other assets together with various trailers and dolly converters • Fielding commences 3rd Qtr FY 85
High Mobility Multipurpose	• Enhanced TOW carrier • Weapons platform for MK-19 40mm • Replaces 8MT vehicles/trailers in Marine division • Replaces all communication vehicles • 26,000 current Marine Corps vehicles/trailers replaced by about 14,000 HMMWVs (IOC FY 85)
Commercial Utility Cargo	• Replaces the M880 • Three body variants (a) Utility (b) Cargo (c) Shelter carrier
5-Ton Truck M939	• Replaces current overaged 2 1/2- and 5-ton tactical fleets • Five configurations • Prime mover for M198 howitzer
Field Logistics System (FLS)	• Exploits the benefits of containerization • Designed around international dimensional standards • Reduces manpower, system costs and shipping space requirements • Five major subsystems • Enhances logistics support system and readiness posture
Medium Girder Bridge	• Lightweight, hand-erectable, easily transportable, and rapidly employable girder-type bridge of welded aluminum alloy • 100-foot spans or 162-foot spans with link reinforcement set • Eight bridges per company (hand-erectible by 4- or 6-man teams)

activated to improve the general support artillery capability through their mobility and survivability.

Target acquisition capability will be enhanced by the fielding of the AN/TPQ-36 counterfire radar during this year. An additional enhancement is the Navy and Marine Corps joint program for a Remotely Piloted Vehicle (RPV) with a desired initial operational capability of FY 88. An RPV unit will be located within each division and will provide the MAGTF with an accurate, medium-range target acquisition capability.

The Marine Corps has selected the Army's Battery Computer System as its battery-level, fire direction computer. Procurement of the Army system allows continued joint training and logistics support, as well as providing us improved responsiveness and accuracy of artillery fires.

The Marine Corps continues to improve its ability to operate in an Nuclear Biological Chemical (NBC) environment. The number of specially trained NBC personnel has been increased by 75 percent. Modernization is proceeding rapidly with procurement of new decontamination equipment, chemical detectors, and protective equipment. We will remain at risk, however, until improved chemical munitions are available to provide a credible retaliatory capability.

Improvements in the aviation element of the Marine Corps have kept pace with the ground. With the support of Congress, the introduction of the AV-8B into the Marine Corps will continue this year. This unique aircraft is compatible with our forward-basing strategies and complements the flexible capabilities of our Marine Corps. The AV-8B eliminates the need for prepared airfields and reduces the required response time for close air support by virtue of its forward displacement. The AV-8B, with twice the range or payload of the AV-8A, builds on the proven concepts of V-STOL (Vertical and Short Take-off and Landing).

As our first AV-8B squadron becomes operational this year, we have confirmed a pressing need for a two-seat trainer version. The largest pilot transition requirement commences in FY 87 and will continue for the next few years. The timely introduction of this trainer, the TAV-8B, is critical to the safe, efficient, and effective conversion of our remaining light attack force.

The Marine Corps, with the support of the DON, has undertaken an initiative to complement the nighttime capability of the A-6E. This attack enhancement program will be introduced first in the AV-8B and will include Forward Looking Infrared Radar (FLIR), night vision goggles, moving-map display, and image-enhanced heads-up display. This combination of systems will enable the pilot to detect, acquire, and destroy targets previously hidden by darkness.

Additionally, we are eagerly anticipating comple-

Table I-VII
Combat Engineer Enhancements

Improved Countermine	• M58 Trailer Mounted Line Charge System—assault minefield breach capability for Tank and Engineer Bn's (IOC FY 85)
	• M59 Mine Clearance System Kit—assault mine breach from surface zone and inland for AAV Bn's (IOC FY 85)
	• M60 Track Width Mine Plow—assault minefield breach capability for M60 Tank (IOC FY 86)
	• Catapult Launched Fuel Air Explosive (CATFAE) will provide an amphibious on-the-move countermine capability to neutralize pressure/tilt-rod mines in surf zone and ashore (IOC FY 91)
	• Vehicle Magnetic Signature Duplicator (VEMASID)—projects magnetic field causing magnetic mine fuse logic to activate and harmlessly detonate mines ahead of vehicles (IOC FY 90)

tion of the A-6E upgrade to the A-6F. This program promises enhanced capability, reliability, and survivability. Improvements in engines and radar systems will provide for the introduction of AAMRAM and *Sidewinder* missiles. Reliability and maintainability features designed to reduce maintenance man-hours will be incorporated. Finally, heightened survivability will be achieved with increased weapons standoff, reduced systems vulnerability, and improved electronic countermeasures. This upgrade is essential to the development of enhanced deep strike, all-weather, and reduced-visibility capabilities of Marine aviation.

The Marine Corps continues acceptance of the reliable and effective F/A-18. Our air crews report that the F/A-18 is both a responsive and agile fighter, and a highly accurate attack platform. As we continue toward our ultimate goal of 12 F/A-18 squadrons, we will convert our fourth and fifth squadrons at MCAS Beaufort, S.C., this year. Concurrently, two Marine F/A-18 squadrons will deploy this year aboard aircraft carriers as part of the Secretary of the Navy's interoperability initiative.

Another fighting improvement that we are investigating is the development of a two-seat, austere, all-weather version of the F/A-18. This two-seat version will feature decoupled cockpits, navigation FLIR, heads-down display, moving-map display, and night vision goggles.

During FY 86, we will accept the first installment of our two-year buy of 44 AH-1T+ attack helicopters. The procurement of the AH-1T+ enables the Marine Corps to reduce existing inventory shortfalls as well as upgrade its capability. The incorporation of the T-700 engine in the AH-1T+ provides Marine attack helicopters the ability to operate anywhere in the world. The *Hellfire* missile system will become operational with the introduction of the AH-1T+ as well as other ordnance capabilities which include TOW, *Sidewinder,* and *Sidearm* missiles. Finally, a night enhancement capability will also be inherent with the AH-1T+. This effort includes night vision goggles with compatible cockpit lighting.

As a result of continuing Congressional support, Marine Corps firepower in the form of air-delivered ordnance has improved. *Laser Maverick* procurement continues with a funding request for 1,500 missiles in FY 86. This missile provides an effective air-delivered, ground or air target-designated laser munition required in the close air support role. Also, procurement of the *Hellfire* missile will provide extraordinary point target accuracy and increased platform survivability. The significant standoff range increase over our present capabilities enhances the survivability of the launching platform. Another low-cost initiative for the attack helicopter and AV-8B force is the *Sidearm* anti-radiation missile which is achieved by retrofitting existing AIM-9C missiles with an anti-radiation guidance group.

Marine Corps aviation experienced a banner year in 1984. We flew more hours than any year since the Vietnam War, and our safety record was the best it has ever been. In addition to replacing many of our aircraft with more capable and reliable planes, we are flying more hours safely.

Naval Surface Fire Support (NSFS) continues as a vital component of the naval power projection equation. Future concepts will not diminish the need for adequate NSFS. Support of tactical options ranging from OTH launch to the more conventional assault may require certain naval surface fire support systems to be able to hit targets at ranges in excess of 100 kilometers.

The present inventory of NSFS platforms is deficient both in range and lethality due to heavy dependence on 5-inch guns. Accordingly, the Marine Corps strongly supports several improvements which are directed at enhancing NSFS, such as the reactivation of all four *Iowa* class battleships and the continuation of the Semi-active Laser Guided Projectile program through full production.

Command and Control

New systems that will assist the Marine on the battlefield are in various stages of development and fielding. They will provide the Fleet Marine Force commanders with automated command and control support to cope with the increased tempo and complexity of the modern battlefield. Our philosophy is to use computers to relieve the Marine of repetitive, routine tasks; to perform certain tasks and calculations more quickly and accurately; and to organize, file, and present information to support decision-making.

One of these systems is the Position Location Reporting System (PLRS). PLRS is an automated, tactical, command and control system that provides the user with accurate, real-time position location and identification information. The Marine Integrated Fire and Air Support System (MIFASS) is another one of our important tactical command and control systems. Through MIFASS, the Marine commander is provided automated support in the integration of supporting arms with the ground scheme of maneuver.

These command and control systems will serve to enhance the coordination of our Navy-Marine Corps team. Our first major step in this direction is the permanent installation of these Marine Corps systems on the LHD 1 class amphibious assault ships. Not only will these tactical command and control systems support the landing force commander, but they will also be capable of providing up-to-date tactical information to the task force commander. Consideration is being given to including the permanent installation of Marine Corps tactical command and control systems in the LCC 19 class Ship Improvement Program.

The Deployable Force Automated Services Center (DFASC) is designed as the solution to the operational deficiency inherent in large-scale automated data processing support for MAB or MAF units when deployed. The new DFASC will be transportable by current Military Airlift Command aircraft, as well as Marine Corps trucking and Navy shipping, and will be provided to each of the existing MAFs and the 4th Division/Wing Team.

This year's budget contains a proposal for a Tactical Air Operations Center, TYQ-23, an important centerpiece for our air command and control modernization program. The unique, modular construction of the TYQ-23 allows it to be tailored to the size of the Aviation Combat Element of the MAGTF. Utilizing increased automation, the TYQ-23 decreases response time and requires fewer personnel. All of the reliability initiatives demonstrated in TYQ-23 support will increase MAGTF responsiveness and mobility.

Intelligence

The thrust of the Marine Corps' intelligence efforts logically focuses on the timely support of power projection. Our operational requirements have been

validated by the fleet commanders and the OPNAV Staff. CinCPacFlt's Maritime Air/Ground Intelligence Cell serves as a useful prototype for this support because it responds to the needs of deployed MAGTF commanders by providing appropriate level, all-source intelligence.

Our ability to produce and disseminate all-source intelligence to tactical commanders is developing rapidly under the Marine Air/Ground Intelligence System (MAGIS). The Intelligence Analysis Center, the "heart" of MAGIS, became operational this year. Other systems being developed include the All-Source Imagery Processor, a soft copy imagery exploitation system which exploits electro-optical, infrared, and radar imagery in near real-time from tactical and national sources. Our Signals Intelligence and Electronic Warfare systems will be modular, transportable, and semi-automated. They will intercept, identify, locate, and jam threat signals from both airborne and ground based platforms as well as analyze and report intelligence information from tactical and national sources.

We remain dedicated to improving the ability of tactical commanders to exploit national intelligence capabilities through the Tactical Exploitation of National Capabilities (TENCAP) program. TENCAP assists in developing the systems, procedures, and force structure required to accomplish this vital function. It also educates and exercises our operational commanders in accessing those national systems which complement the tactical reconnaissance and surveillance assets organic to MAGTFs operating around the world.

Marine Corps' membership on such national-level committees as the National Foreign Intelligence Board, the National Foreign Intelligence Council, the Intelligence Management Coordination Group, the Defense Reconnaissance Support Program Review Panel, and the Critical Intelligence Problems Committee, has greatly enhanced our participation in national-level intelligence forums.

Combat Service Support

We are continuing to restore and enhance the ability of our Force Service Support Groups (FSSGs) to support and maintain amphibious operations at all levels of MAGTF configuration. Increasing the manning level of the FSSGs represents the culmination of our Combat Service Support Restoration Plan which will have elevated the FSSG manning of wartime requirements from a level of concern in FY 80 to a healthy level by FY 88. I might add that these enhancements are being applied to our Reserve component combat service support force as well as to the active component.

The Marine Corps' implementation of the DOD Acquisition Improvement program focuses on readiness and improved support to the Fleet Marine Force. We have increased emphasis on Integrated Logistics Support system designs which are reliable, maintainable, and supportable. This approach enhances combat service support by producing better weapons and equipment. Our strategy in the acquisition cycle includes the use of proven systems, adequate "front end" test resources, and integrated support requirements.

The Marine Corps Standard Supply System, is being designed to provide a single supply system within the Marine Corps, encompassing both the wholesale and retail functions for the Fleet Marine Force and the Supporting Establishment. It will replace four existing systems and will essentially combine their distinctly separate functions into one system.

The Marine Corps Field Logistics System (FLS) improves our strategic mobility and sustainability by concentrating on the development of needed material in configurations that are compatible with the requirements of container ships. Not only will we be more assured that available merchant shipping is used effectively, but also, by implementing the FLS modularization concept, a greater flow of material across an unimproved beach can be realized.

To assist in the off-load of containers from merchant fleet ships, we are in the process of procuring and fielding the Lightweight Amphibious Container Handler (LACH). The LACH, which has been operational since FY 84, is a towed, straddle-lift carrier designed to remove containers and tactical shelters from beached landing craft and place them on trucks for further transport to inland combat service support areas. The LACH can also be dismantled and transported to inland areas for routine container handling.

The Logistics Vehicle System (LVS) consists of a powered front-body unit and four rear-body, trailer-type variants. This vehicle system will be capable of carrying standardized containers and heavy cargo, and will provide a necessary and significant improvement in tactical mobility while achieving a more supportable logistical vehicle fleet. The LVS is expected to be operational during FY 85 with a total of 1,400 in service by the end of FY 88.

An area of immediate concern is that we do not presently have hospital ships to provide the medical support needed where our forces are employed, ready when the first casualty occurs. To correct this deficiency, the Navy has embarked on a program to provide dedicated afloat medical support for our forces through the Hospital Ship program which will provide two *San Clemente* class tankers converted into hospital ships with 1,000 beds each. Initial operating capability is scheduled for May 1987 and February 1988.

The Rapidly Deployable Medical Facility (RDMF), which is currently afloat in the Indian Ocean, is the first facility to be acquired by the Navy in recent years which is dedicated to treating, holding, and returning patients to duty within the theater. The RDMF and the 11,250-bed Fleet Hospital program will provide the bed space and treatment capability to reduce the logistics requirement for medical evacuation out of the theater and, consequently, reduce the demand for experienced, combat Marine replacements.

The Marine Corps has improved its medical capabilities through the acquisition of medical equipment and consumables to support each of the three MAFs. This support is designed to have the capability to be phased ashore, built-up, and consolidated consistent with the tactical situation.

An increase in the number of medical personnel assigned to operational units provides enhanced medical care. These additional physicians, medical planners, and hospital corpsmen ensure that the required medical support is planned for and available at the time needed.

Consistent with our efforts to establish a warfighting capability through MPS Brigades, we will preposition the medical equipment and supplies necessary to support each of the MPS Brigades.

As a force-in-readiness, the Marine Corps must be capable of rapidly deploying to respond to crises

or contingency situations. Presently, we plan our embarkation process manually; however, we are currently developing an automated information system, called the Computer Aided Embarkation Management System (CAEMS), which will function on a microcomputer and use state-of-the-art graphics features. This system will enhance the Marine Corps' capability to combat-load ships and aircraft with each MAGTF's complement of supplies and equipment by providing automated embarkation load plans. We envision this system as an improvement to our current Standard Embarkation Management System. Upon implementation, CAEMS will work in conjunction with the U.S. Air Force Computer Aided Load Manifesting (CALM) which is a prototype, automated, aircraft load planning system.

Manpower

At this point, I wish to draw your attention away from our hardware-related programs and discuss our singularly most important program—Marines and their families.

I continue to be awed by the character, quality, and commitment of the men and women performing the difficult missions assigned to Marines. While all of the matters discussed thus far have a high priority nothing has a higher priority than continuing to enlist and retain quality young people who are among the finest in America.

Total force accessions in FY 84, in addition to surpassing our goals, included 95 percent high school graduates—3 percent above last year—and better than 96 percent who achieved scores in Categories I-III in the Armed Forces Qualification Test (AFQT).

I am particularly pleased that the distribution of bright, self-disciplined young Marines to our combat units is approaching that of our technical and logistical units.

Our recruiting successes of the past five fiscal years are the result of four factors:

- First, a spirit of patriotism that exists among young Americans desiring to serve their country.
- Second, the dedicated non-commissioned officers assigned as recruiters in the neighborhoods and small towns across the nation.
- Third, favorable economic and demographic conditions.
- Fourth and most importantly, Congressional support in providing the required resources.

We are closely monitoring our near- and long-term recruiting capabilities. Economic forecasts and demographic projections seem to indicate that there could be a change in future enlisted recruit quality. We expect to continue to achieve the numerical goals, but our analyses indicate the potential for a sharp downturn in the percentage of AFQT Category I-IIIA enlistments beginning in FY 86 and continuing through FY 90. This downturn could ultimately affect our capabilities and systems throughout the Marine Corps.

Officer accession programs also continue to provide intelligent and enthusiastic young people prepared to shoulder the future leadership responsibilities of our Corps.

We completed a banner year in total reenlistments during FY 84. Through our retention of well qualified enlisted Marines, the leadership and experience in the force rose substantially. These reenlistments resulted in considerable monetary savings by reducing the need for replacements requiring training. The combination of good retention and a vigorous

lateral movement program among occupational fields contributed to a reduction in skill imbalances. It must be stressed, however, that the selective re-enlistment bonus program remains the most significant factor in retaining trained and experienced Marines in hard-to-fill skills. Thus far, the success realized in FY 84 continues in FY 85.

By the end of FY 86, our manpower plan calls for an end strength of 199,500—a modest increase of 1,200 over the FY 85 level. The net requirement for additional Marines is primarily associated with ongoing weapons and equipment modernization and enhancement programs. Concurrently, the net result supports our overall goal of maintaining a high level of personnel readiness.

I wish to highlight a particular manpower problem which we need your help to correct—the shortage of field grade officers. The Defense Officer Personnel Management Act (DOPMA) field grade ceilings, coupled with high and stable retention rates, are preventing the Marine Corps from meeting the promotion timing window for the grade of major as intended by Congress and our programmed requirement for 500 additional officers in this grade. I wish to emphasize that this grade relief request will not increase the active duty strength of our officer corps.

The Comprehensive Flag and General Officer Legislation is also of great significance. In addition to permitting us to properly staff important internal and joint billets, we believe this legislation will provide the control over flag and general officer numbers desired by Congress and will offer the services a stable set of expectations for structuring key leadership requirements.

As I travel throughout the Corps listening and talking to our Marines, I continue to be impressed by the strong, consistent support furnished by the silent partners—the Marine family. Our families rely on institutional support—a fair, reliable compensation system, medical care, commissaries, and exchanges—in order to bear the hardships of essentially maintaining two family units.

Today's military compensation system is a complex, multidimensional support system—one made up of pay, benefits, reimbursements, incentives, and retirement. Military pay is the basic foundation that touches every Marine. The trend over the last few years has been to base pay increases on retention and recruiting successes, not on economic reality. I remain committed to achieving pay comparability for all Marines—comparability which maintains military pay at a level that is equitable and competitive with the private sector.

Benefits and reimbursements support the foundation of the compensation system. Normally non-headline areas, benefits and reimbursements became the center of attention this past year. We must collectively stabilize the benefits of the military compensation system enjoyed by all service members that specifically provide for the reimbursement of costs inherent in permanent change of station moves.

The current retirement system continues not only as a powerful career incentive, but also as a force management tool, because the pool of retirees eligible for recall to active duty supports mission readiness in the total force. It is one of the key ingredients of the entire compensation system and should not be changed.

While compensation issues are important, the well-being of Marines and the soundness of the family environment directly affect retention of quality personnel. Many initiatives, beyond compensation, are planned to improve the well-being of our families. Programs designed to enhance family relationships lead to more effective and happier families. This benefits both the Marine Corps in particular and society in general.

In the event of mobilization, many families will need assistance during the transition from Reserve and retired status to active duty. To assist with this transition, Marine Corps Casualty/Family Assistance Teams—established in over 75 locations throughout the country—are tasked with providing information to families and reporting and processing casualty notifications as they occur.

Another personnel-related matter is BAQ/VHA allowances, where we appreciate your efforts to improve BAQ/VHA entitlements. Marines in certain areas, however, are still concerned with finding adequate housing for their families because, as the cost of housing increases, these Marines find themselves unable to obtain satisfactory housing within their BAQ/VHA allowances.

An additional concern of Marines for their families is military medical and dental care, an integral part of the Marine's total benefits package. I fully support DOD's initiative to provide a dependent dental program.

Morale, welfare, and recreation must be viewed as important, although intangible, elements in retention and readiness. Non-appropriated funds support the majority of our recreation programs, and we continue to emphasize the judicious use of these funds.

The concerns just addressed take on additional importance as we continue steady progress in our effort to increase the number of accompanied tours on Okinawa. Currently, there are more than 1,300 command-sponsored Marine families there. This number, which is tied to the availability of family housing, will increase by 225 in FY 85 and FY 86. Combined with the expanding Unit Deployment Program (UDP), the accompanied tour program continues to reduce unaccompanied tours overseas, reducing costly permanent change of station moves and increasing personnel stability in Okinawa-based units. Our goal continues to be accompanied tours for all career Marines and dependent-restricted tours for all first-term Marines. Stability afforded by the UDP and longer accompanied tours directly enhances readiness. We are convinced that the impact on family morale and retention of quality career Marines will be of benefit for years to come.

One personnel area in which we have experienced considerable progress is our substance abuse program. Early in 1982, we implemented new programs to eliminate the use of illegal drugs and the abuse of alcohol in our Corps, and, according to a recent survey, these programs are working. Drug abuse has dropped by one-half from the 1980 level. Per capita consumption of alcohol is down by one-third, and the number of heavy drinkers is down by one-half since 1980. We continue to actively pursue our goal of non-tolerance of drug use and alcohol abuse. We continue to deglamorize the use of alcohol and encourage those who elect to drink to do so wisely. Leadership, education, urinalysis, discipline, treatment, and rehabilitation are the basics of our success.

Another important personnel area is the increased

importance of women in the Marine Corps. During the last decade, while end strength remained relatively stable, the number of women on active duty nearly tripled to 643 officers and 8,550 enlisted. We recently completed a comprehensive review of the classification, assignment, and deployment policies for enlisted women. The primary goal in this review was to ensure combat readiness of Marine air-ground task forces. The review established that enlisted women should continue to serve in 35 of 39 occupational fields and that the enlisted women population should increase from the present 8,550 to about 10,500. Women will continue to serve throughout the Fleet Marine Force and Supporting Establishment in time of peace and during war.

Marine Corps policy provides for full utilization of our vital civilian personnel. Employment of civilian personnel permits more effective manning of the Fleet Marine Force; enhances training, readiness, and sustainability; provides continuity in operations; and provides specialized experience that is not otherwise available within the military structure. Our civilian personnel are employed in a wide variety of professional, technical, and administrative functions.

In concluding my remarks on manpower, I wish to say that leadership requires special emphasis. I will continue to insist that Marine Corps policies and programs continue to produce and reinforce sound leadership. Whether in a peaceful barracks setting or in a tense, crisis situation, your Marines deserve leaders who are competent, dedicated, and professional; to these principles we are committed. Americans historically have always responded to strong, fair leadership. The Marine Corps develops leaders willing to accept responsibility for the mission and for people. Our policies are designed to create stability at the battalion and squadron level, and they stress teamwork and unit *esprit* in order to maintain high morale and superior readiness. Our emphasis on quality Marines produces individuals prepared to respond to the leadership challenge.

Marine Corps Reserve

The Marine Corps Reserve is charged with providing the capability for rapid expansion of the force during a national emergency. Today, the Reserve is an integral partner, providing substantial peacetime contributions, as well as wartime capabilities. These forces present a vital, added dimension to the Marine Corps' ability to respond to crises.

The Marine Corps has a mobilization capability that is second to none among the services. Trained units and pretrained individuals can be quickly assimilated from the Reserve into a total war effort. Provisions have been made to augment or reinforce active commands with a great range of capabilities, from individual combat or support units to an entire Reserve MAGTF. In a maximum effort the Reserve will provide almost one-third of the manpower and a broad range of combat assets, to include 100 percent of the civil affairs capability, 67 percent of force reconnaissance assets, 40 percent of the tanks, 33 percent of the heavy artillery, 33 percent of the anti-aircraft missile capability, and 30 percent of light-attack aviation.

From a purely manpower perspective, mobilization of pretrained Marines from the Individual Ready Reserve (IRR) has become increasingly refined. The procedure for identifying grade and skill requirements is fully automated, as is the flow process which directs the individual to a vacancy in his gaining command. A pre-assignment program identifies certain reservists whose presence is time sensitive and issues "hip-pocket" orders directing them to a particular post within the first few hours of mobilization. This accurate, timely expansion of the force with qualified individuals and organizations is an essential dimension to Marine contingency planning and may be a critical dimension to success on the battlefield.

The wealth and depth of experience and expertise in the Reserve are impressive. Combat experience alone, still high among prior-service, career reservists, is an asset to be skillfully retained and utilized. The Marine Corps has also developed a program to take advantage of skills developed in the business world. Mobilization Training Units, currently composed of 900 officers and 100 staff non-commissioned officers in the IRR, are focusing their expertise on special projects for 18 operational sponsors in 35 states. The technical credentials and completed projects of these Marines are being catalogued for future reference.

Over the years there has been a changing character in the active/Reserve relationship. Once viewed primarily as a source of pretrained individuals, selected Marine Corps reservists train today as highly effective combat organizations. Units are tied to active commands in contingency planning. This concept of Reserve reinforcement is now being expanded to include provisions for a Reserve MAGTF.

Total Force equipment modernization and structure growth for the Reserve are carefully planned and orchestrated. In concert with active forces, Reserve units will receive the major, new, ground equipment and weapons systems being introduced into the Marine Corps inventory. Along with equipment modernization, numerous structural changes are occurring, to include activation of the remainder of the 4th Medical and 4th Dental battalions, an LAV battalion, a target acquisition battery, and the reorganization of infantry and direct-support artillery battalions. In FY 85, the Marine Corps will activate its first Selected Marine Corps Reserve unit in Anchorage, Alaska. This unit will provide opportunities to take advantage of extensive Alaskan training areas and to conduct operations in a genuine arctic environment. Growth and modernization of Reserve aviation are also proceeding according to plan. A third fighter squadron was activated in 1984, and plans are being made for an additional KC-130 squadron in 1986. "Front line" aircraft released from the active force as they transition to new systems are being placed in the 4th Marine Aircraft Wing. This should not imply that the Corps is satisfied with this level of Reserve upgrade. These aircraft are aging, and there are acknowledged shortages, especially in attack helicopters and aerial refuelers. Marine acquisition plans are addressing these shortages and are effecting system modernization by transitioning Reserve squadrons immediately following the active force upgrade to such aircraft as the F/A-18 and MV22A. The Marine Corps now intends to upgrade all Reserve fighter and some attack squadrons to the F/A-18.

Manpower and equipment are only a portion of the readiness equation. It is training that cements the relationship and transforms the individual Marine and his unit into combat power. Mobilization training, essential in the Reserve, is routinely tested with a system of "no-notice" mobilization tests which ensures these capabilities are maintained. During Powder River

'84, which was essentially a command post communications exercise at the JCS level, the Marine Corps actually moved units and individuals to their gaining commands through designated stations of initial assignment. Some of these units and individuals also participated in actual exercises overseas.

Combat training in the Reserve has taken a new direction, and home centers are no longer the focal point. In 1984, 25,000 Marine reservists trained in exercises around the world from Puerto Rico to Korea. The active/Reserve training relationship is beginning to mature, and the direction is sound. The Corps will continue to pursue increased Reserve integration into major active force exercises.

Evidence of the success of the Corps' Total Force training policies can be readily seen by the fact that a Reserve squadron, VMFA-112 in Dallas, competing with all active and Reserve fighter squadrons, was designated the Marine Corps' Fighter Squadron of the Year for 1984. Additionally, in August, the first brigade-sized Reserve landing since the Korean War was conducted.

The Marine Corps has substantial capability in its Reserve. Marrying their civilian pursuits with the needs of the service, these "Citizen Marines" are a great source of pride in peacetime and, if called upon, will be an indispensable source of strength for the national defense as part of the Marine Corps' Total Force.

Operational Performance

In my report last year I stated that the Marine Corps' top operational priority was readiness. I would like to reiterate that the operational readiness of our Fleet Marine Force units to respond rapidly throughout the entire spectrum of conflict continues to be the Marine Corps' top priority. Our emphasis on readiness is apparent in the array of Marine air-ground task forces which are fully combat ready and prepared for immediate contingency deployments.

The combat readiness and ultimate capability of our units are dynamic and perishable commodities dependent on manning by qualified personnel, sufficient combat and combat support equipment; realistic training; and, perhaps most important, the Marine Corps' uncompromising standards of leadership. In each of these areas we have continued to improve. A balanced, intensive, challenging training program integrates personnel and equipment in realistic training exercises conducted throughout the world. The effectiveness of this training is measured by the Marine Corps Combat Readiness Evaluation System. This demanding regimen periodically measures the performance of Fleet Marine Force units against standards established for all aspects of contemporary warfare. The final ingredient of the readiness equation, leadership, continues to be unmatched. Increased tour length for battalion commanders has improved commandership. Emphasis on professional education for young leaders has enhanced the performance and stability of our forces.

Training

The Marine Corps' training goal is to provide Marines realistic, challenging training that prepares them to accomplish all assigned missions and tasks. In an effort to be more efficient and effective in achieving this goal, the Marine Corps is accelerating the development of collective and individual training standards for use within the operating forces and Supporting Establishment. The ability of unit commanders to achieve combat readiness by demonstrating high standards has long been the hallmark of Marine Corps training. From large scale amphibious exercises down to the training of individual fighting skills required for small unit tactics, the word is clear for both Regular and Reserve Marines: "Train as you would fight."

Since FY 80, the number of major exercises in which the Marine Corps has participated has more than doubled. Concurrently, increases in the size of our exercises have resulted in more Marines receiving mission-oriented training on a more frequent basis. These training deployments away from home bases have also provided additional opportunities for training in varied terrain and climatic conditions that approximate those in potential contingency areas of the world. Typical Marine Corps training exercises are designed to accommodate small units as well as the largest Marine air-ground task forces.

Eight active and two Reserve battalion-sized, air-ground training exercises, which include live-fire events, are conducted annually at the Marine Corps Air-Ground Combat Center, Twentynine Palms, Calif. In addition, one Reserve and nine active battalions conduct mountain and cold weather exercises annu-

ally at the Marine Corps Mountain Warfare Training Center, Bridgeport, Calif. Combined arms exercises, along with all mission-oriented training, are constantly refined and provide valuable lessons learned which are regularly incorporated into the latest developments in doctrine, tactics, and equipment. The desert and mountainous environments at Twentynine Palms and Bridgeport, respectively, provide the climate and terrain which parallel geographic areas of concern to the Marine Corps. The maneuver areas at Twentynine Palms permit integration of live ordnance for all of the weapons systems employed in the Marine Corps. Similarly, about 140 Marine air crews train each year at a specialized tactics and weapons squadron at Yuma, Ariz., and provide not only a cadre of tactical experts at their units but also help to refine aviation tactics, doctrine and equipment.

Small unit training is the keystone of successful large unit operations. Annual Marine Corps-wide competition among rifle squads, advanced tactical training for air crews, and frequent performance testing of battalions and squadrons provide the appropriate link between specialized training for individuals and the desired operational readiness of air-ground forces.

Our individual Marines are proud, disciplined, proficient, and loyal. *Semper Fidelis* is more than a motto; it is a way of life. Such motivation is molded and directed by the finest teachers in the world, beginning with our drill instructors at the recruit depots and continuing with our staff non-commissioned officers and officers in the Fleet Marine Force. Professional military education and skill progression training are provided at appropriate junctions of grade and billet assignments to develop the many facets of a military professional.

As the art of modern warfare becomes more sophisticated and prone to rapid change, the Marine Corps must take full advantage of new technology to modernize training programs and methods. In this regard, we shall use the products of technology with judgment and precision. Flight simulators have long been recognized and used to supplement actual flight training. Maintenance simulators are being developed and utilized with increased student learning at significant cost savings. Since there is no substitute for live-fire exercises, sufficient quantities of ammunition must continue to be provided for that purpose. Simulation devices are being developed which will enhance the skills of riflemen; tank, TOW, *Dragon,* and *Stinger* gunners; and artillery and mortar forward observers. Additionally, other devices are being developed which will enhance the skills of commanders and their staffs in tactical decision-making, command and control, and fire support coordination.

Application of automated data processing technology to training management procedures is expected to achieve a significant decrease in the amount of time required to accurately develop training standards for new weapons systems and tactics; to improve the capability of commanders to plan, budget, and allocate training resources; and to evaluate all training programs in a timely fashion. We have established internal procedures to ensure that the development of such training programs and methods coincides with the procurement of each new weapons system. Joint service review of technology for training purposes is required to eliminate duplication of effort and is enthusiastically supported by the Marine Corps.

We are not, however, going to forsake a well trained Marine Corps to achieve a low-cost training program. While we are making use of the best that technological advances can provide in the area of training support, the Marine Corps remains dedicated to maintaining a fully capable and highly trained combat force ready to perform in any contingency. It is to that end that all of our training effort is directed.

Forward Deployments

Our forward posture worldwide, in support of national policy, allows us to respond to any international crisis when directed by the National Command Authority.

II MAF is the major operational command on the East Coast and continuously has a MAU forward-deployed in the Mediterranean Sea. II MAF also deploys elements to the Atlantic Ocean and Caribbean Sea. The 28th MAU, for example, makes periodic deployments to the Caribbean to demonstrate United States' presence while the 26th MAU makes an annual deployment to Norway.

III MAF is forward-based in Japan and Hawaii and deploys the 31st MAU in the Western Pacific and Indian Ocean. Beginning in February 1985, I MAF, based at Camp Pendleton, will deploy a MAU to the Western Pacific, supporting III MAF with its MAU commitment.

Our three MAFs can also provide air alert battalions which give us the capability to rapidly reinforce our forward-deployed units should the need arise. Additionally, in an effort to improve the overall combat capabilities of the Navy-Marine Corps team, the superb aviation interoperability initiative which began last year will accelerate. FY 86 will witness the first two of four Marine A-6E squadrons assigned to deployed carrier air wings. Two Marine F/A-18 squadrons will already be aboard. U.S. Navy A-7 squadrons will concurrently deploy to WestPac in support of Marine ground forces on a continuing basis. This highly successful mutual support initiative, which began last year, has been an overwhelming success. It promises to vastly improve the flexibility and effectiveness of your naval forces.

While deployed, these MAGTFs conduct operations and training exercises designed to improve the Marine Corps' ability to operate with the other services and our allies. We train hard so that when called on, we will be prepared. We will continue to be ready, whether we are providing humanitarian assistance or executing a contingency mission.

Fiscal Responsibility

The financial resources we are requesting for FY 86 will support the requirements and programs discussed throughout this statement. This budget increases our readiness by fully implementing the MPS strategic mobility enhancement program, by continuing the modernization of our battlefield equipment for the active and Reserve forces, and by narrowing the gap toward our targeted sustainability objectives.

A summary of financial resources by appropriation and authorization request which make up the Marine Corps' FY 86 budget to support the programs and requirements discussed during this statement is displayed in Appendix II.

Conclusion

In conclusion, I would like to reaffirm the commitment of your Marine Corps to jealously guard the trust and confidence of Congress and the American

people. You can be assured that with the improved weapons, mobility, sustainability, and command and control assets provided, soundly led, properly trained, quality Marines will be ready to respond when called. The Marines, as America's force-in-readiness, provide the flexibility to enter the spectrum of conflict at any point and produce the required results.

As Marines, we have the unique capability, unmatched anywhere in the world today, to make a forcible entry from the sea with a fully integrated, mission-tailored, combined-arms, self-sustaining air-ground team. We enable our country to keep the qualitative edge needed to provide a decisive, flexible, credible response by amphibious forces in global crises.

Together, we prepare for the call that may or may not come—the call to "land the landing force." As Marines, we do not determine when or if that call will come. I can assure you, however, that, with your support, we are ready and will remain ready to respond to that call. At the same time, we continue to share the hope that the call will not be sounded.

In light of Soviet policies and unprecedented military growth, the need for the United States to be able to establish maritime superiority has never been greater. Because of your support, we continue to improve our amphibious capability, and needed modernization programs are now well under way. With continued support, we will provide the maximum defense for each dollar invested in the Marine Corps.

For 209 years, Marines have served this nation well and faithfully. I assure you, that tradition will continue.

Thank you.

Appendix II
Fiscal

Table II-I

Appropriation/Authorization Request

($ In Millions)

Appropriation Title	FY 1985	FY 1986	FY 1987
Military Personnel, Marine Corps	4,967.1	5,217.4	5,297.6
Reserve Personnel, Marine Corps	271.8	290.0	306.0
Operation & Maintenance, Marine Corps	1,650.9	1,667.4	2,035.8
Operation & Maintenance, Marine Corps Reserve	58.8	61.6	66.9
Procurement, Marine Corps	1,836.7	1,726.8	2,182.6
Marine Corps Stock Fund	34.9	42.7	63.0

Table II-II

End Strength Authorization Request

(# In 000s)

Category	FY 1985	FY 1986	FY 1987
Active Duty End Strength	198.3	199.5	201.7
Selected Reserve Average Strength	40.2	41.9	43.6
Civilian Personnel End Strength (USMC Portion Of DON Request)	21.7	22.1	22.5
Average Military Student Training Load, Active	20.3	20.8	21.6
Average Military Student Training Load, Reserve	3.4	3.8	3.6

☆ U.S. GOVERNMENT PRINTING OFFICE FY-1986 526-385/30305